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Northwest Medicine

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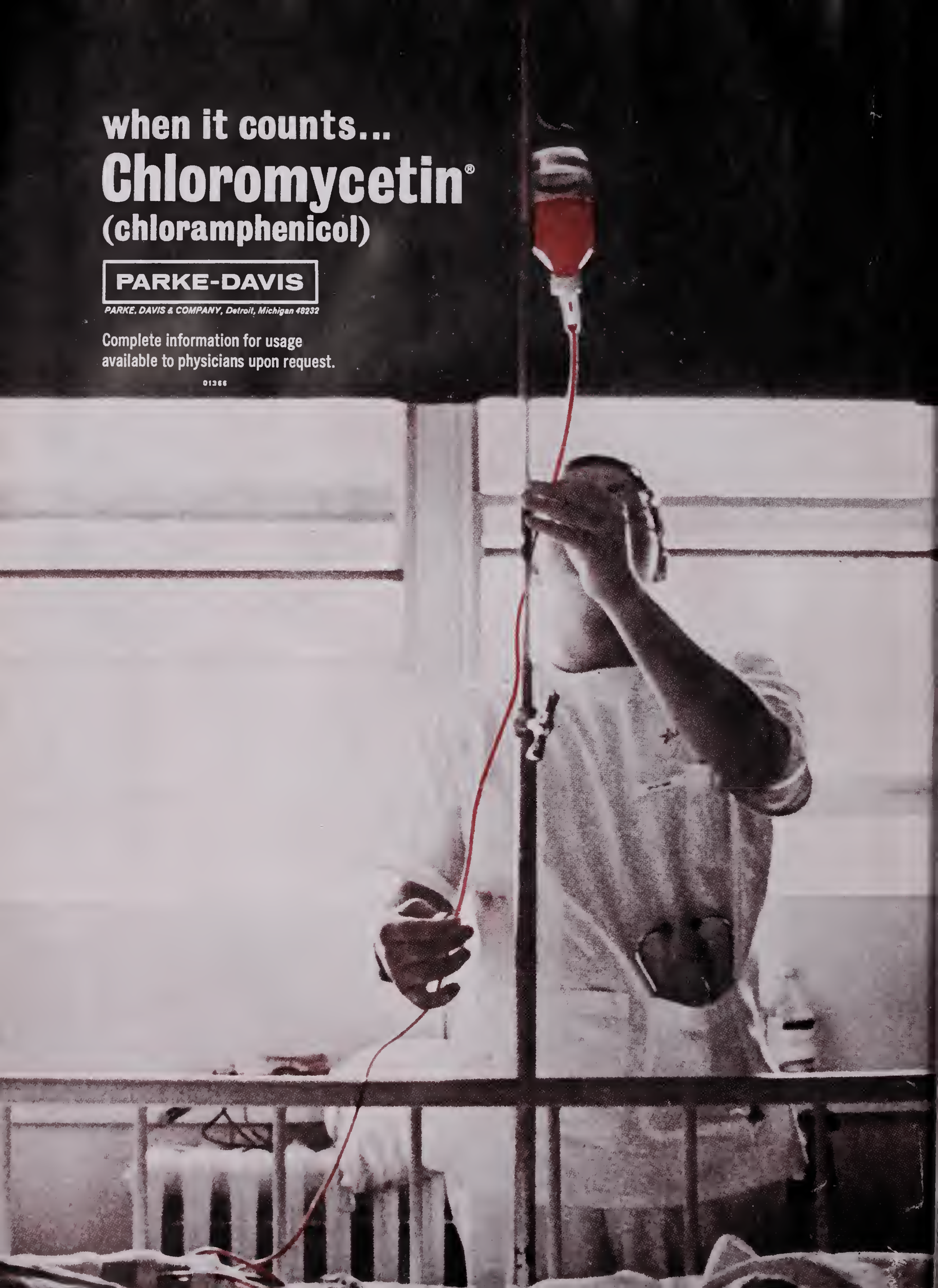

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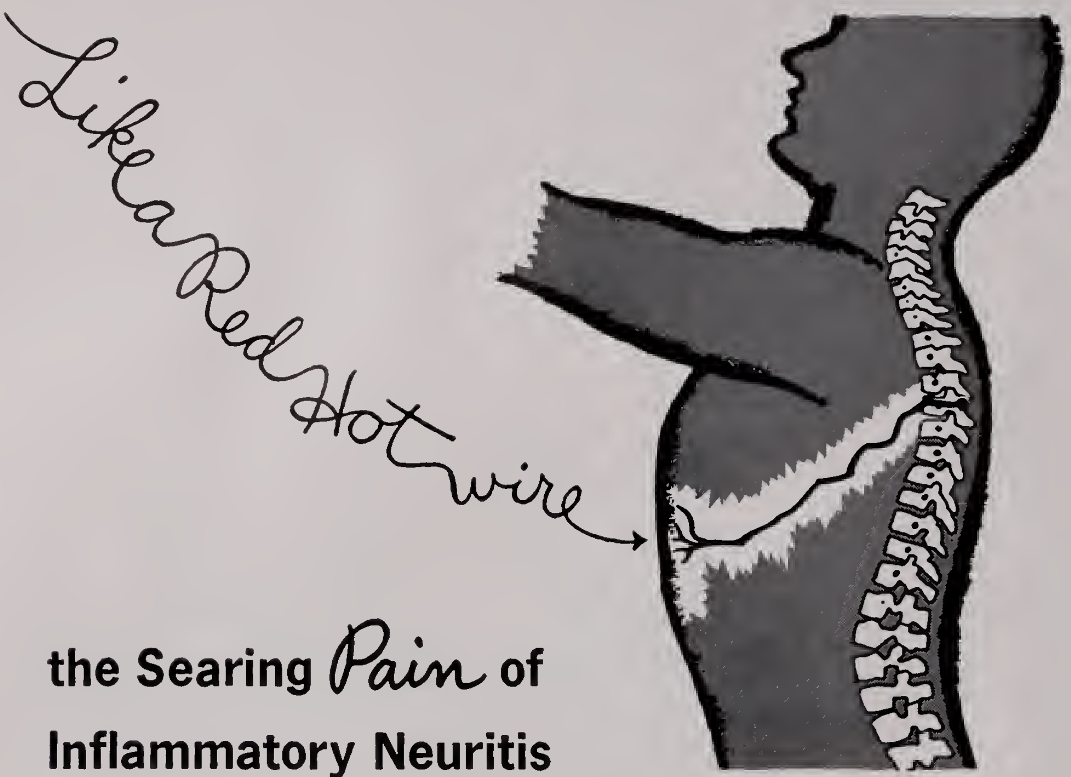
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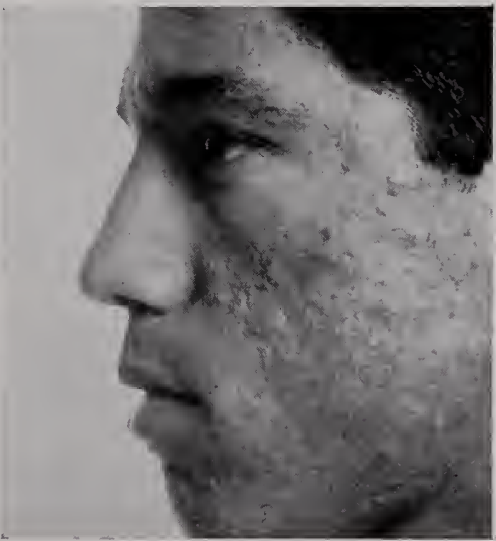

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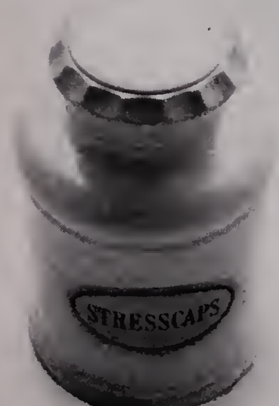

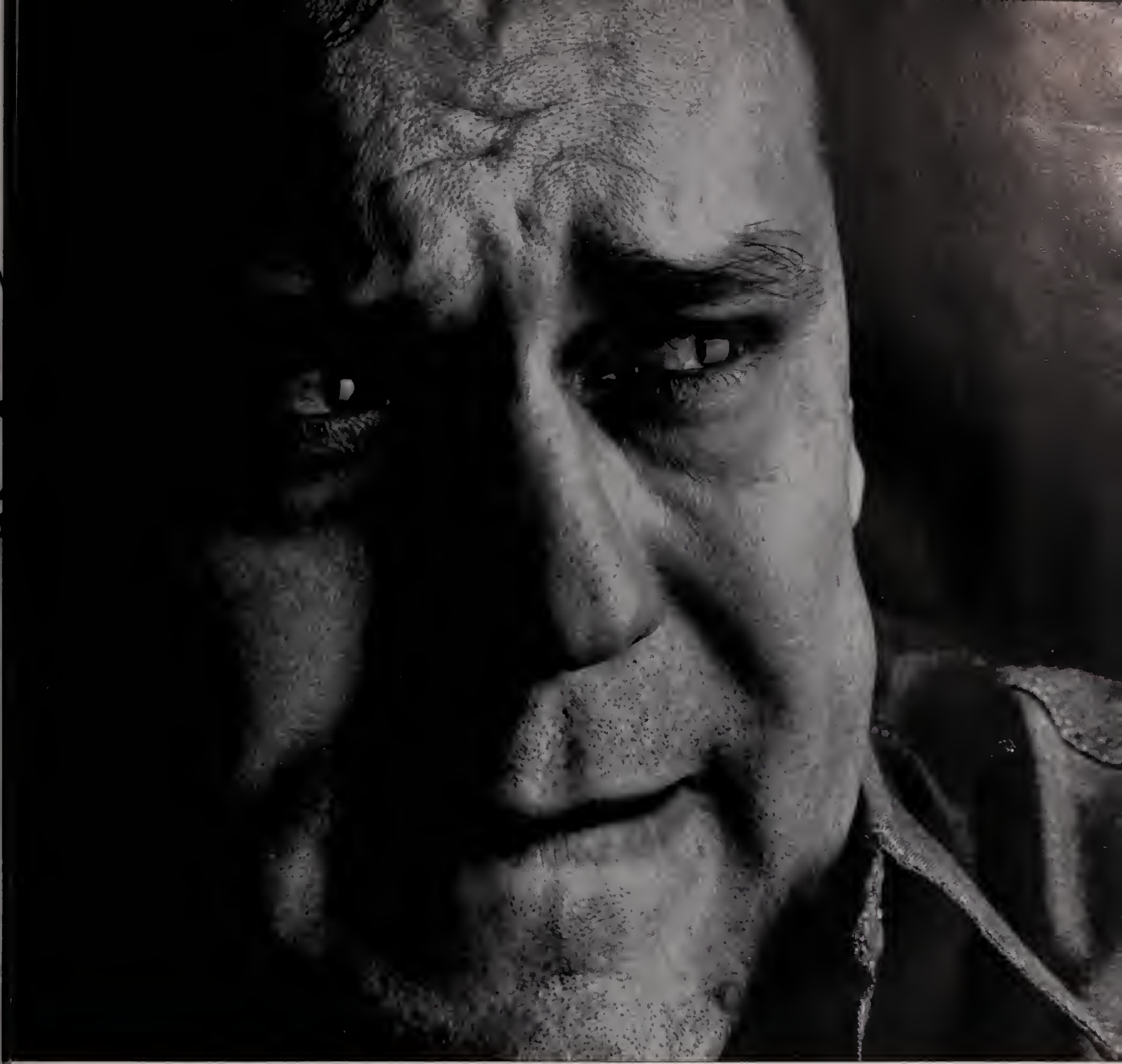

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this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts

"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.[1]

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.[2]

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.[3] The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.[4] The cilia then sweep the particulate matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.[5]

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.[6] The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.[7] The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.[8]

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.[9] In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.[10] The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.[11] The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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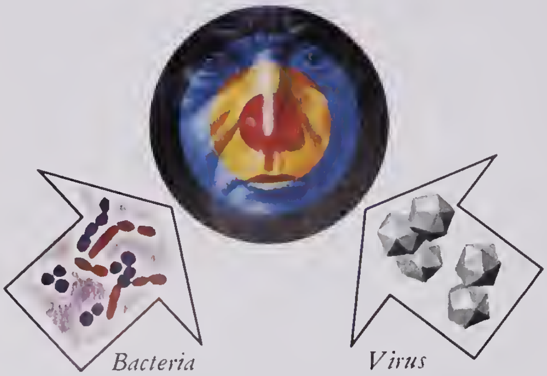
cipitate an attack of rhinorrhea in hay fever sufferers.[12] Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.



the complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.[13] This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections, antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases, symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

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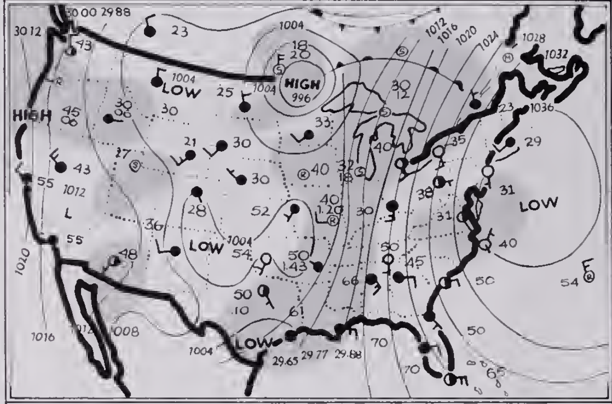
Weather Forecast Throughout the Nation



RAIN TURNING TO SNOW, INCREASING WINDS AND DROPPING TEMPERATURES FOLLOWED BY COUGH, CONGESTION AND PAIN

Tussagesic® provides up to 24-hour coverage of the tough cold with a single timed-release tablet dosed morning, midafternoon and at bedtime. Coughs are broken up, runny and stuffed noses are cleared and pain is relieved.

Each Tussagesic® timed-release tablet contains:

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Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: Patient should not drive a car or operate dangerous machinery if drowsiness occurs. Except under professional care, do not give to patients under 12 yrs. or those who have persistent cough, high fever, heart or thyroid disease, hypertension or diabetes or use for more than 10 days.

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when congestion is complicated by sulfa-susceptible bacterial invaders in the upper respiratory tract...

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Each tablet contains: Triaminic® 25 mg. (phenylpropanolamine hydrochloride 12.5 mg., pheniramine maleate 6.25 mg., pyrilamine maleate 6.25 mg.); Trisulfapyrimidines, U.S.P. 0.5 Gm. (sulfadiazine 0.167 Gm., sulfamerazine 0.167 Gm., sulfamethazine 0.167 Gm.)

PHARMACOLOGY: Triaminic decongests and promotes drainage of nasal and paranasal passages, and prevents any further histamine-induced damage; the triple sulfonamides inhibit susceptible bacterial invaders. INDICATIONS: For congestion and infection of the upper respiratory tract caused by sulfa-susceptible organisms. DOSAGE: Adults: 2 to 4 tablets initially, followed by 2 tablets every 6 hours. Medication should be continued until patient has been afebrile for 3 days. ADVANTAGES: The advantages of Trisulfaminic in upper respiratory infections are: freedom from narcotics or alcohol; therapeutic reliability; safety; economy; ease of administration; freedom from potential sensitization to broad-spectrum antibiotics which may be reserved for lower respiratory or other infections caused by susceptible organisms. CONTRAINDICATIONS: Contraindicated in sulfonamide and antihistamine sensitivity, impaired renal function, pregnancy approaching term, and in premature infants and newborn infants during the first month of life. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. WARNING: Use only after careful evaluation in patients with liver or renal damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions with administration of sulfonamides. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed periodically. Sulfonamide therapy may potentiate the hypoglycemic action of sulfonylureas. PRECAUTIONS: Use with caution in patients with histories of significant allergy or asthma. Assure an adequate fluid intake. Because the antihistamines may cause drowsiness of varying degree, warn patients about activities requiring alertness such as driving a car or operating dangerous machinery. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease and diabetes. ADVERSE REACTIONS: As in all sulfonamide therapy, the following reactions may occur: headache, nausea, vomiting, diarrhea, icterus, hepatitis, pancreatitis, urticaria, rash, fever, cyanosis, hematuria, crystalluria, proteinuria, blood dyscrasias, petechiae, purpura, neuropathy and injection of the conjunctiva and sclera. If one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. PACKAGE INFORMATION: Trisulfaminic Tablets: Supplied in bottles of 100 tablets. CAUTION: Federal law prohibits dispensing without prescription.

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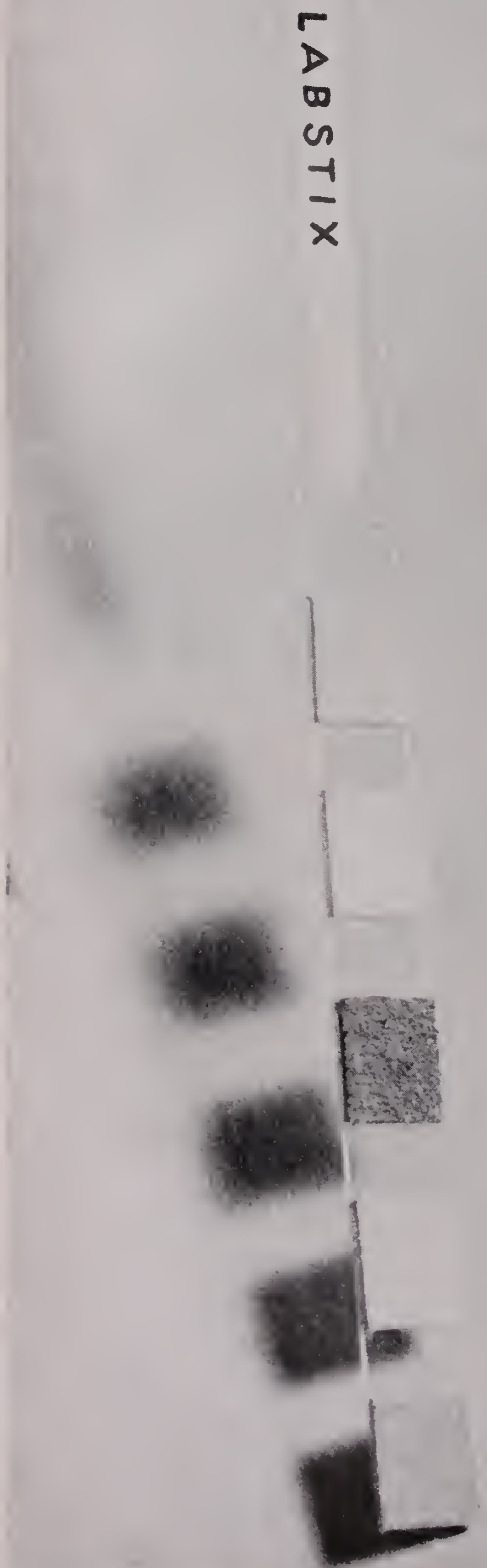

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Now a Clear Reagent Strip of Firm Construction

...facilitates handling during testing procedure. Excellent color contrast made possible by the clear plastic strip, together with the clearly defined color charts provided, permits precise, reproducible colorimetric readings in all 5 test areas. A more definitive interpretation of uro-analytical facts is made possible.

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■ Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

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Keeps the Promise of Pain Relief

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Norinyl® tablets
(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

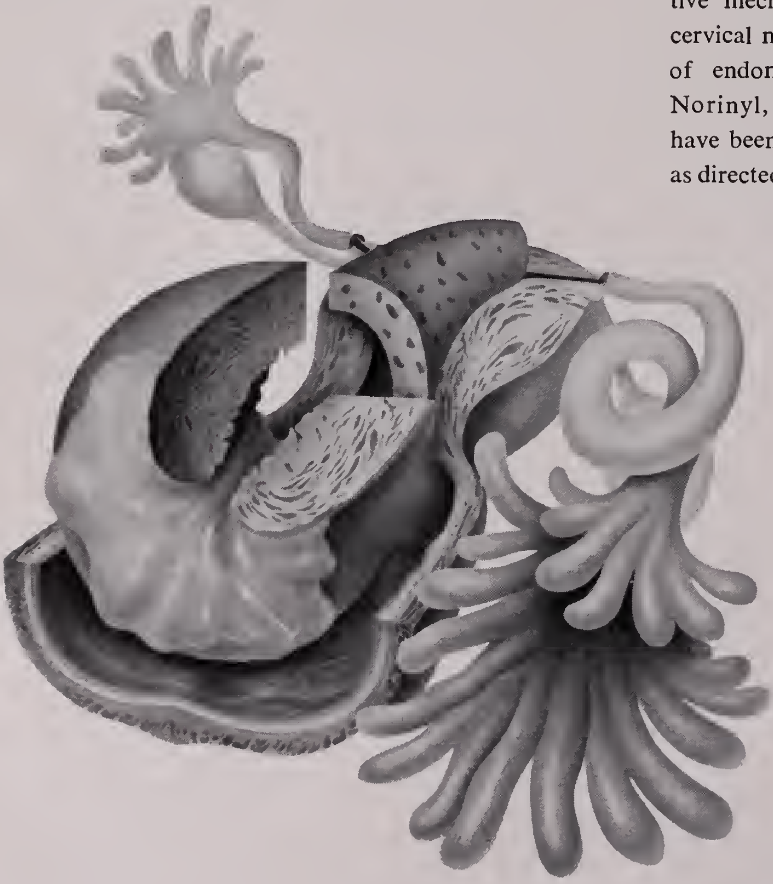
inhibition of ovulation by means of 2 time-proved hormonal agents

production of a cervical mucus hostile to sperm motility and vitality

creation of an endometrium unreceptive to egg implantation

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.

Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: **1.** Council on Drugs. JAMA 187:664 (Feb. 29) 1964. **2.** 8rvans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. **3.** Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. **4.** Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. **5.** Hammond, D. O.: Ibid. **6.** Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. **7.** Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. **8.** Kempers, R. D.: GP 29:88 (Jan.) 1964. **9.** Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. **10.** Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. **11.** Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. **12.** Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. **13.** The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. **14.** Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. **15.** Merritt, R. I.: Appl Ther 6:427 (May) 1964. **16.** Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from
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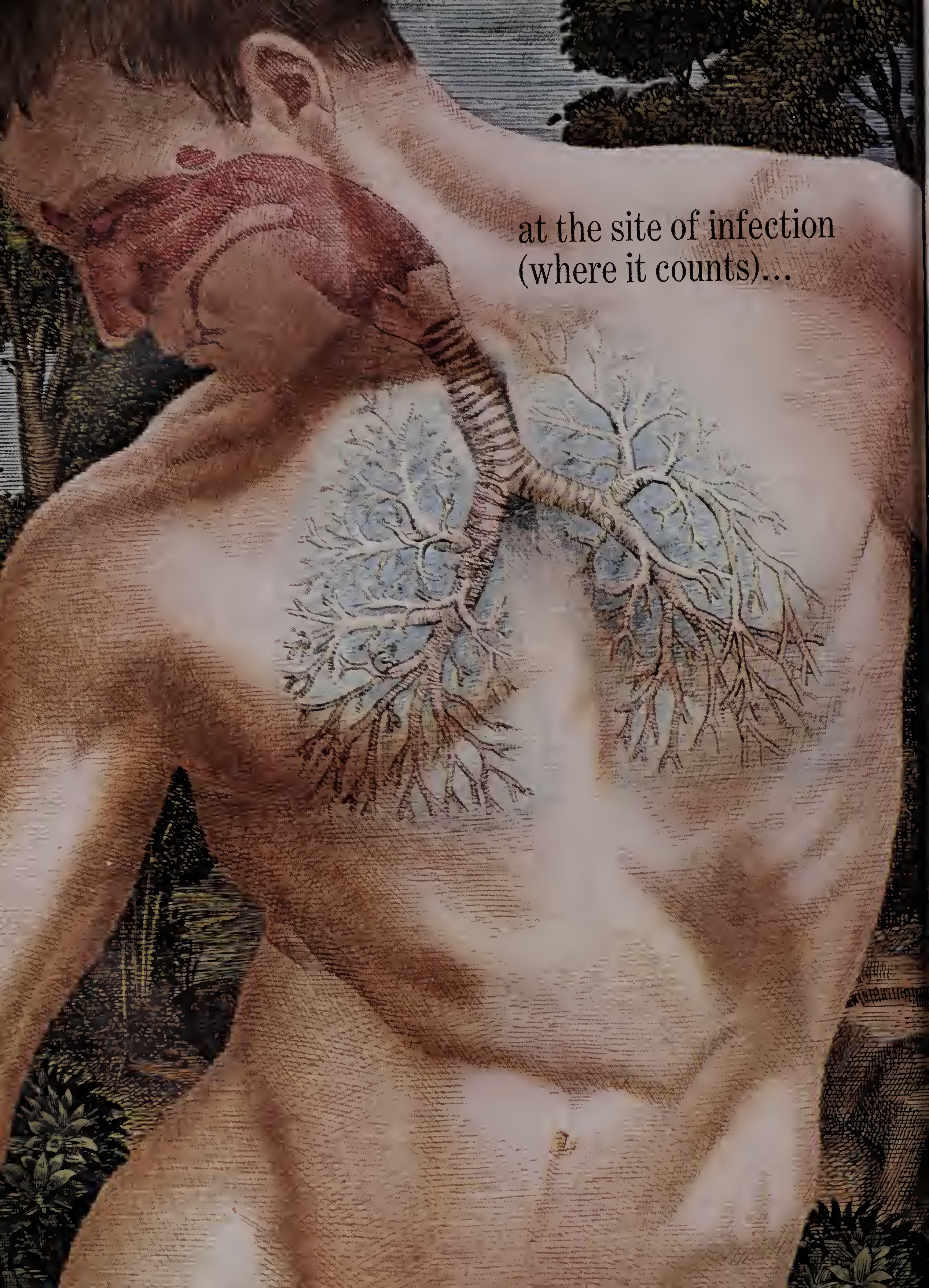
LABORATORIES INC., PALO ALTO, CALIF.

Norinyl® tablets
(norethindrone 2 mg c̄ mestranol 0.1 mg)

for multiple contraceptive action


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed ... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

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Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

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CORRESPONDENCE

This department is a forum, provided for free individual expression. Letters are published as received and given little or no editing. Proof is submitted when time permits, before publication. Responsibility for statements rests with the authors of these communications and not with this journal which strives only to protect the right of individuals to speak for themselves. Ed.

Stilbestrol Misspelled

Editor, NORTHWEST MEDICINE:

I hate to pick nits, particularly in the yuletide season, but someone should have told Dr. Kimball by this time that stibestrol is not spelled *stilbesterol or stilbeserol,* nor is diethylstilbestrol spelled *diethylstilbesterol.* The correct spelling, according to my dictionaries, is *stilbestrol* for stilbestrol and *diethylstilbestrol* for diethylstilbestrol. I believe the explanation lies in the origin of the word, which is from estros rather than from sterol as is commonly assumed. This is the same root word that forms the basis for estrogen.

Best wishes for the holiday season and for the new year.

Very sincerely,

JULIAN S. ANSELL, M.D.
Chairman, Department of Urology
University of Washington School of Medicine
Seattle, Washington 98105

Editor, NORTHWEST MEDICINE:

It seems inconceivable to me that a medical journal should misspell a well-known drug utilized in everyday practice. Not only have you misspelled stilbestrol on the cover of NORTHWEST MEDICINE for all the world and God to see, but you have misspelled it throughout the editorial by Charles Kimball and have gone on to the inaccuracy of misspelling it in your references.

JOHN H. WALKER, M.D.
1118 Ninth Avenue
Seattle, Washington 98101

Vaccination Certificate Changed

Editor, NORTHWEST MEDICINE:

A new certificate form must be used beginning January 1, 1967, for all vaccinations performed in the United States for international travel. Smallpox, Cholera and Yellow Fever Vaccination Certificates already issued remain valid until the expiration date of the certificate. This revised edition includes changes in the smallpox and yellow fever vaccination certificates, as amended by the eighteenth World Health Assembly in May, 1965. All certificates printed prior to September, 1966, should be destroyed.

The International Certificate of Vaccination or Revaccination against Smallpox requires the physician to indicate that either a freeze-dried or liquid vaccine, certified to fulfill the World Health Organization's recommended requirements for manufacture of the vaccine, was used. Also, the origin and batch number of the vaccine must be recorded.

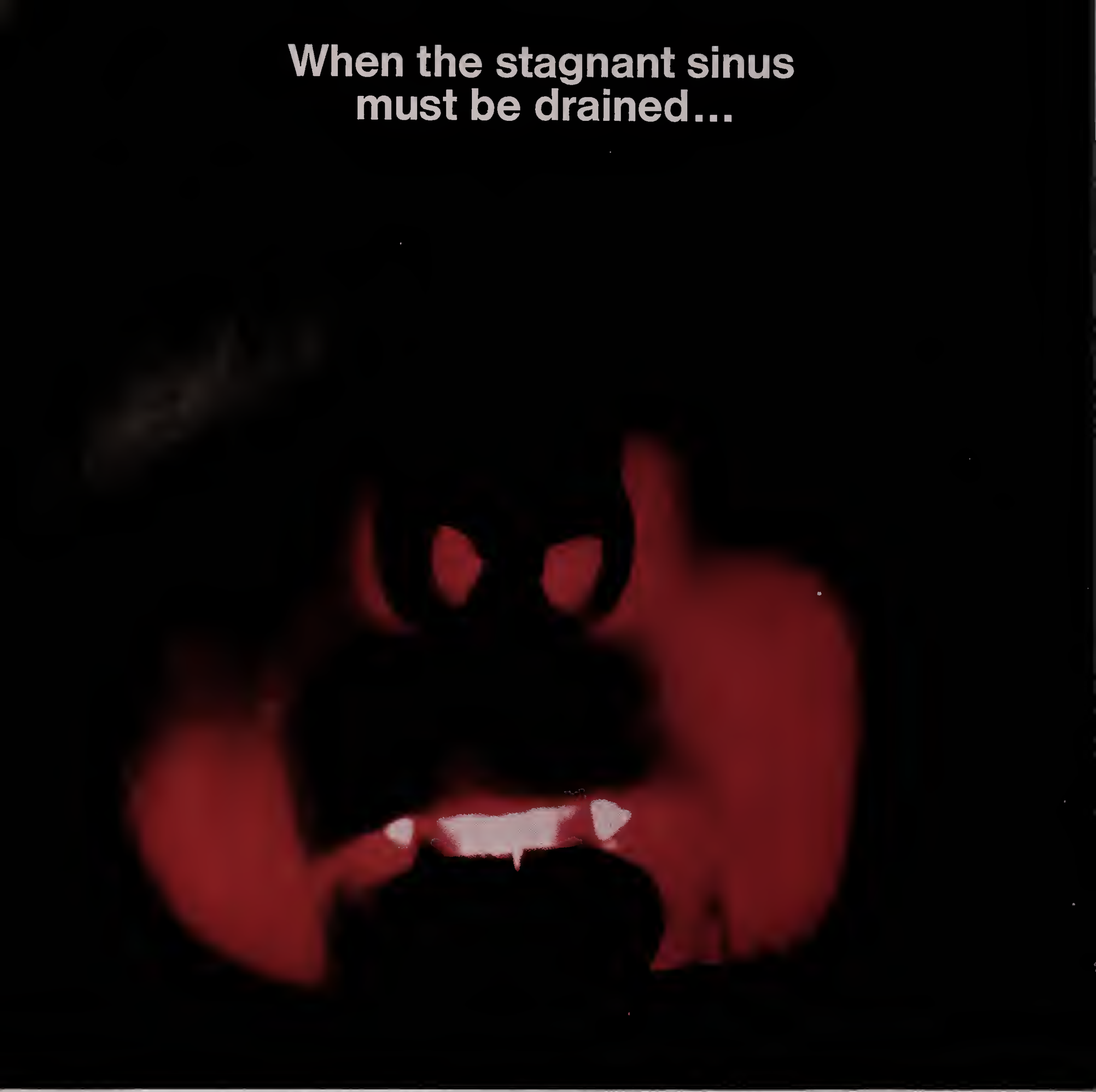
The International Certificate of Vaccination or Revaccination against Yellow Fever was amended to extend the validity of the certificate from six to 10 years as of May 12, 1965. Yellow Fever Vaccinaiton Certificates already issued are automatically extended to be valid for 10 years from the date of vaccination or revaccination.

A supply of the new certificates is on sale at the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, at 10 cents a copy or $5 per hundred.

Please communicate with this office if we can be of further assistance.

LOUIS JACOBS, M.D.
Medical Director
Chief, Division of Foreign Quarantine
Department of Health, Education and Welfare

When the stagnant sinus must be drained...



Transillumination of the sinuses – diffuse shadow on right side of face indicates unilateral maxillary sinusitis.

In the common cold, Neo-Synephrine is unsurpassed for reducing nasal turgescence. It stops the stuffy feeling at once. It opens sinus ostia to re-establish drainage and lessen the chance of sinusitis. With Neo-Synephrine, in the concentrations most commonly used, decongestion lasts long enough for extended breathing comfort, without endangering delicate respiratory tissue. Systemic side effects are virtually unknown. There is little rebound tendency.

Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Neo-Synephrine® HCl

Brand of phenylephrine hydrochloride

is available in a variety of forms, for all ages:

- ⅛% solution for infants
- ¼% solution for children and adults
- ¼% pediatric nasal spray for children
- ½% solution for adults
- ½% nasal spray for adults
- ½% jelly for children and adults
- 1% solution for adults (resistant cases)

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Antihistamine-decongestant

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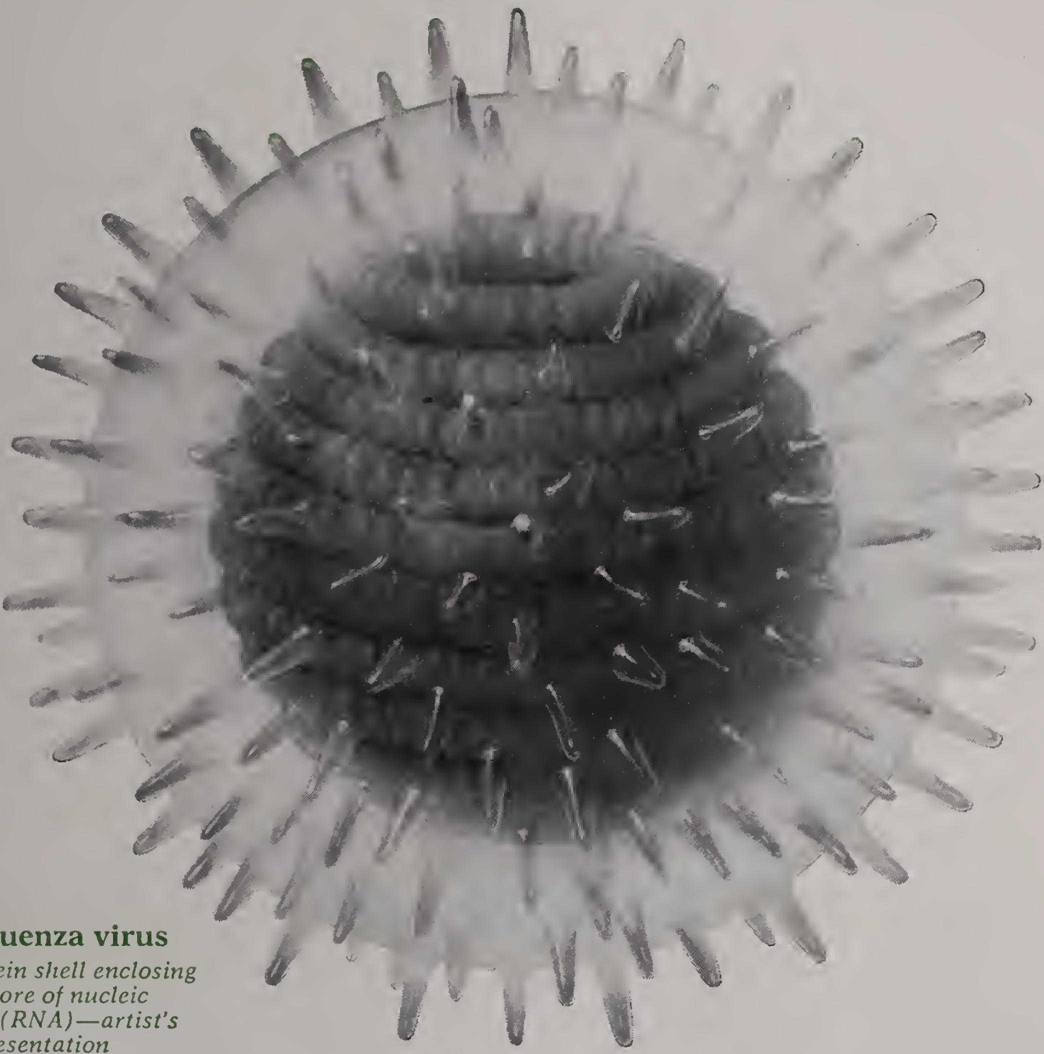
Symmetrel®
(Amantadine HCl)

The first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

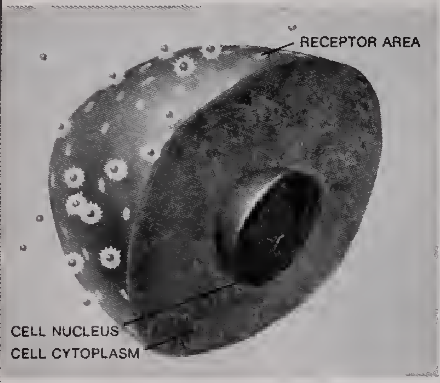
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

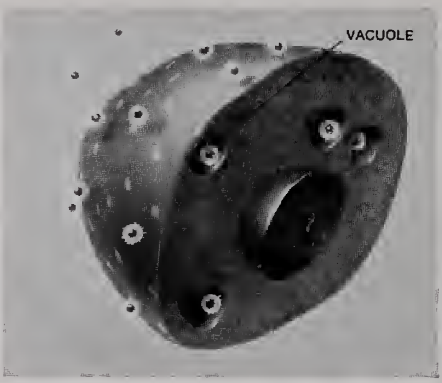
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

How the influenza virus invades and destroys the untreated cell



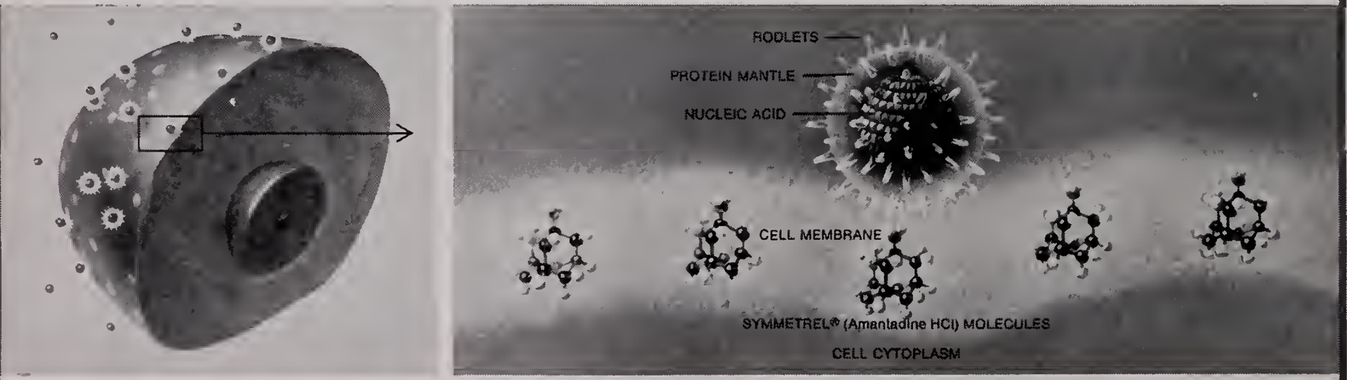
1 Viruses outside the cell attach themselves to specific cell receptor areas



2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm

3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]



Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

[1] "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl. *Syrup:* Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

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Does he really care? Is he alert, encouraged, positive and optimistic about getting out of bed and back to work soon?

Or is he giving in to the depressing impact of confinement?

When functional fatigue complicates convalescence, Alertonic can help...

Pleasant-tasting Alertonic is pipradrol hydrochloride—an effective cerebral stimulant whose gentle analeptic action helps counteract the apathy and inertia that so often delay convalescence—together with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Nothing fosters confidence and a sense of wellbeing better than your own personal warmth, understanding and encouragement together with Alertonic to help insure prompt response.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals...tastes best chilled.

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Available Only On Prescription

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%; pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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arrest diarrhea

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Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . 2.5 mg.
(Warning: May be habit forming)
atropine sulfate . . . . 0.025 mg.

in gastroenteritis, acute infections

Effectiveness—Physiologic evidence indicates that Lomotil acts directly on the smooth muscle of the bowel to lower motility and control diarrhea. This action is unsurpassed in promptness and efficiency.

Convenience—Lomotil is available as small, easily carried, virtually tasteless tablets and as a pleasant, fruit-flavored liquid.

Versatility—The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or adjunctively in diarrhea associated with:

- **Functional hypermotility**
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- **Acute infections**
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- **Malabsorption syndrome**
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- **Ulcerative colitis**
- **Food poisoning**
- **Drug therapy**

For correct therapeutic effect
Rx correct therapeutic dosage

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage

3-6 mo. . .	½ tsp.* t.i.d. (3 mg.)
6-12 mo. .	½ tsp. q.i.d. (4 mg.)
1-2 yr. . . .	½ tsp. 5 times daily ([illegible] mg.)
2-5 yr. . . .	1 tsp. t.i.d. (6 mg.)
5-8 yr. . . .	1 tsp. q.i.d. (8 mg.)
8-12 yr. . .	1 tsp. 5 times daily (10 mg.)
Adults: . .	2 tsp. 5 times daily (20 mg.) (or 2 tablets q.i.d.)

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE *Research in the Service of Medicine*

Two Authors, Two Codes

Two books have been much in the news for reasons that are superficially parallel. Two authors have written about two men, both dead. Positions of the authors, however, are not parallel and there are, therefore, differences in consideration that are far from superficial.

Objections by families of John F. Kennedy and Sir Winston Churchill have put both books into legal controversy and, consequently, into lively discussion by reporters, columnists, and editorial writers.

President Kennedy's widow has tried to block publication of portions of *Death of a President,* because she wishes to withhold from public view some of the things that happened while she was under emotional stress. The material is said to include evidence of low regard by the Kennedy family for the present incumbent of the White House. There appears to be no claim that the statements were not made. Mrs. Kennedy wishes to have them suppressed.

Sir Winston's family, however, seem to have more logical grounds for their objection to the book by Lord Moran, for many years Sir Winston's personal physician. At least it seems so to the medical mind, if not to the public. Revelations in *Winston Churchill, The Struggle for Survival—1940-1965* were not given to an author with an exclusive contract but were gleaned from conversation between patient and physician. There is a profound difference.

The claim that they are contributions to history is made for both books. This may be true, but is history a valid excuse for publication of confidential disclosures made by a patient to his physician? The patient, ill, disabled, perhaps in fear of death, must tell his physician things he would never admit when in health. He must do so in confidence that his secrets will not be revealed. Without this understanding the physician is deprived of the information he needs and cannot serve the patient as he should. Hippocrates understood, and so have conscientious physicians ever since. The Oath, and all the canons of medical ethics leave Lord Moran a betrayer of his patient's confidence and a violator of principles that should not be violated by a physician. For physicians are not ordinary men, they do not bear ordinary responsibilities, and their conduct cannot be judged by ordinary standards.

It is possible that his peerage, and his many honors, may have too long exposed Lord Moran to political and social customs hardly those of a confidence-respecting profession. Gossip, rather commonly an ingredient of both society and politics, may become a habit, and the guard of a well disciplined medical mind could gradually come down. This would be particularly easy in an age when morals are relaxed and many citizens have become accustomed to looking the other way when faced with deviation from previously accepted standards. But there is no place in medicine for head turning. Scarlett, in discussing Lord Moran's transgression, says professional secrecy is not to be "disposed of as an ancient shiboleth that should be discarded."[1]

He adds, "It may be true . . . that pure scientific knowledge is ethically neutral. But when this scientific knowledge is linked with the art of medicine, the neutrality—if such there be—disappears and it becomes accepted fact, recognized by profession and public alike, that medicine is humanistic and in all circumstances to be used for benificient purposes. This, I remind you, is the cumulative result of 2,500 years of medical knowledge and practice operating in society."

Two codes have long been in existence and breakdown of that to be observed by physicians should never be permitted. The British Medical Association took cognizance of the principles involved in the Churchill disclosures, leaving no doubt about position. A resolution calling betrayal of a patient's confidence unethical was adopted at a special meeting of the BMA Representative Body. The vote was 597 to 3. ■

H. L. H.

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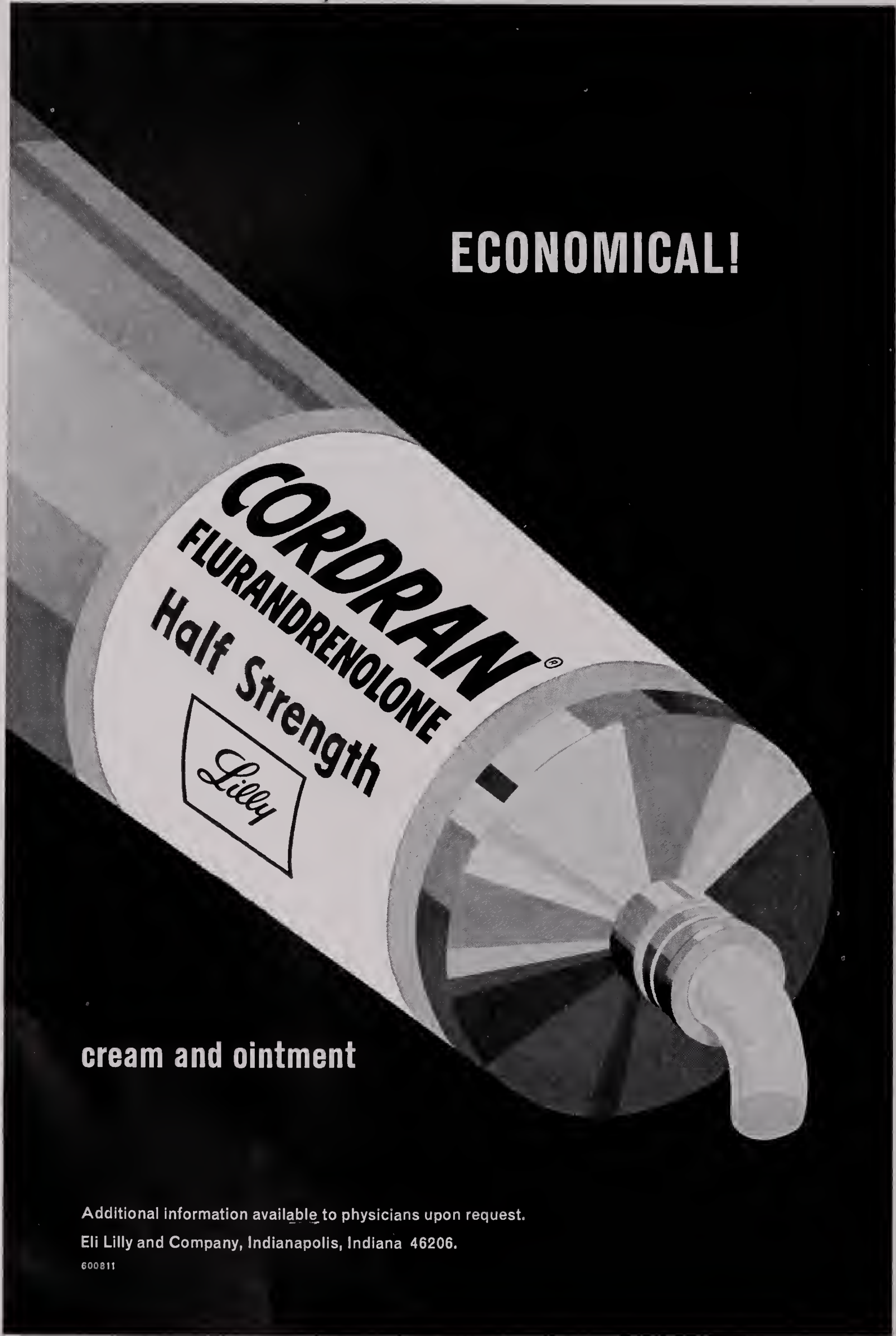
[1] Scarlett, E. P., Doctor out of Zebulon, Discretion tested by a hundred secrets, Arch Intern Med 118:603-609 (December) 1966.



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Psoriasis, A Physiopathologic Adaptive Reaction

Six Year Cure by Retraining

DANIEL R. KOHLI, M.D., Seattle, Washington

Psoriasis has not yet been proven to be due to viral, bacterial, mycotic, or parasitic invasion, or to chemical, thermal, meteorological, or unusual physical trauma. It does not appear to be an allergic reaction and its victims do not appear to be socially, economically, or emotionally much different from the rest of us. It does have the characteristics of an adaptive reaction and retraining offers help to those willing to accept carefully directed instruction. Four cases illustrate the possibility. One, a totally incapacitated, middle aged male, has been totally relieved for six years. The others were less spectacular because less ravaged by the disease but all responded favorably while following the regimen that employed retraining only and used no medication

Psoriasis plagues more than four million people in this country and accounts for approximately 6 per cent of all cutaneous disorders.[1] The cause is unknown and the treatment is empirical. The psoriatic has many doctors and hurries to try any new recommendation with hope; the change is often associated with temporary remission.[2] The condition is one of epidermipoiesis, responding to a number of desquamating agents and to systemic and intracutaneous adrenal steroid therapy. The former is often associated with serious side effects and it may make the condition worse.

Remissions may appear spontaneously and pregnancy may bring temporary relief. The victim suffers its stigma and endures treatment with coal tar, mercury, radiation, lipotrophic agents, ultra violet light, 6-mercaptopurine, methotrexate, betamethasone, sunburn, and so on.

The psoriatic resents his appearance and his fellow man winces with repugnance, often fearing contagion. At times he is unemployable and must alter his dress and activities to hide the red, scaling lesions. Social life is inhibited and in Biblical times he was confused with the leper. While the condition can at times be controlled, it is never cured; its appearance and disappearance are eccentric and whimsical. It has been observed that persons afflicted with psoriasis experience dilation of skin arterioles, increased tone of minute blood vessels, and exacerbation of psoriasis, in association with physical or situational stress.[3-6] Mitchell concluded that "the psoriatic response is a reaction pattern to non-specific stimuli in which the psoriatic defect is brought to light by an increased rate of metabolism in cells regenerating after injury. The Koebner response may be observed in patients with progressive and eruptive psoriasis and the site of the irritation determines the location of the erruption but is not the etiologic agent. The cutaneous injury is followed by repair or attempt at repair."[7]

Long observed, when psoriatic lesions and normal skin areas were interchanged in the same patient by skin graft, the usual outcome was spread of the psoriasis.[8] The normal skin, grafted into psoriatic areas becomes completely affected with the condition in seven of nine cases, while the Koebner phenomenon appears only once in 50 incisions or injections in these patients, "suggesting an infectious or inflammatory nature of the condition." It is generally felt that psoriasis may be a latent, inherited trait, analagous to diabetes mellitus, that becomes clinical under certain conditions.

Environmental stress, and human reaction to it with exacerbation of clinical illness, has been observed in a number of conditions.[9-12] This has been concisely phrased by Wolf. "1. Many diseases represent simply too much or too little of essentially normal adaptive reactions, 2. regulation of these reactions is often achieved through cyclic variations in the homeostatic systems, 3. wide swings in a cycle may constitute the evidence of disease and thus 4. modifications in these wide swings to a point of equalibrium between health and disease may be achieved through influence on the regulatory processes from the higher centers of the central nervous system."[13]

HOW AND WHY

This is an account of a clinical experience in which four victims of psoriasis were treated by reeducation and retraining methods. No physical or chemical agents were used (other than self dosing with aspirin by Case 1). Each patient gave an initial diagnostic history and had routine physical examination with the usual scanning laboratory tests. The history included a detailed exploration of the circumstances, particularly the security or lack of security, as it seemed to him, during the formative years of his life and a chronologic accounting of the more alarming episodes in his later life.[14] A chronologic record of onset, flare and remission of his psoriasis was also recorded.

A retraining program was instituted in which the patient was urged to learn three categories of self management:

1. Neuromotor control: A personal variation of tension control was taught in order to eliminate residual neuromotor activity and its reverberations within the body.[15, 16]
2. Rational thinking:[17] Archaic beliefs were identified and exposed for their inappropriateness and alarming qualities. He was taught to challenge irrational assumptions he had heretofore accepted, and to deal with them in a realistic or pragmatic manner in order to decrease the alarm reactions of his physiology.
3. General physicial exercise: Muscle strengthening, conditioning and retraining were encouraged, along with recreational activity.

This clinical observation was instituted because of a personal interest in functional disorders and after observing psoriasis coexisting, in a number of patients, with other functional disorders, some of which had also altered physiology enough to produce tissue change. One particular patient, who had been abandoned by both parents at age 5, and developed his first ulcer symptoms when he was forced to become self-supporting at 13, developed psoriasis six weeks after gastric resection at age 52. His psoriasis cleared when he retired and recurred only on his right hand when it became involved with the gross tremor of Parkinsonism. It appeared on the left arm and hand when his left side became involved. I had observed that patients with functional disorders, such as the acid-pepsin-ulcer syndrome, usually had experienced an obvious break in childhood security and later experienced clinical symtoms associated with life situations that were alarming. This seemed somewhat analagous to the observations of Selye in which sensitized animals, after an appropriate delay, administered a challenge with stress, develop renal, myocardial and connective tissue damage.[10, 11, 18]

Hypnosis was used in each case to improve communication, for instruction, for recall of specific early life experiences, and to demonstrate general body relaxation. While technically not a complete cessation of neuromotor activity, relaxation under hypnosis quickly demonstrates gross release of habitual, residual bracing and tensing. Techniques suggested by Cheek[19] and Mears[20] were used for recall of early, apparently significant experiences. Although direct hypnotic suggestion for skin healing was not used, per se, each person was continually urged to tell himself he would get better. These latter suggestions might be compared to therapy by auto suggestion,[21] or simply to the supportive effect in any instance of therapy.

Interviews consisted of discussions of the manner in which the patient had met unfavorable situations in the past, methods by which he could have handled them more suitably, and evaluation of the true situation as it probably had happened rather than as meaningfully interpreted at the time. The inappropriate conclusions and attitudes he had developed as result of these experiences, and the archaic concepts he had been taught, were labeled "Blue Laws." He was asked to develop more contemporary, rational, pragmatic methods for judging his actions and the actions of others. He was taught the disparity between the tangible or real quality of life difficulties and the quantity of self induced alarm he had amplified within his interior communication system to his own detriment. General methods by which we can live without alarm, in a rapidly changing society, with conflicting mores, imperfect parents and fallible people, were taught. Very early in each discussion he was taught that the world is not fair and just, that parents and friends often disappoint us and that the Biblical sinner is in each of us, yet these facts need not be interpreted in superlatives. And that great alarm can be generated within the body in this manner, causing physiologic responses not appropriate to the situation, many of which produce symptoms and signs not truly indicative of a physically noxious agent.

He was not asked to change his own moral or ethical behavior but to be less alarmed by his own trespass and the trespasses of others. All therapy was directed, to the best of my ability, to decrease his general alarmedness and to restore native, peaceful animal physiology. Since skeletal muscle is our largest cellular organ, develops atrophy from disuse and from residual tonic shortening, and houses an enormous sensory system, muscular conditioning and control were emphasized.

Each of these patients described a sense of personal frustration in his attempt to adapt to life, both as a child and into adult years. Each was tense, irritable, and unable to manage himself to his own satisfaction. Generally they were sedentary, inactive, rigid, and on guard. Skeletal muscle was flabby and atrophic.

Each was instructed in the normal, physiologic reaction of the mammalian to threat. The general alarm reaction was explained in simple terms. Pavlovian conditioning was explained, along with the basic aspects of learning, thought association, and muscular habit pattern sequences.[22]

The skin and the nervous system are derived, embryonically, from the same primordial layer. Therefore, a brief review of the skin as one of the organs of communication, the basic inflammatory reaction to noxious insult, and the nature of inherited traits, (such as skin reactivity, allergy, diabetes, grey hair and baldness) were mentioned. Each was advised that any improvement would be due to his *own* quieting of his interior signaling system, to reduction in afferent stimuli from the receptors in his striated muscle, and to general body homeostasis. The various skin responses to threat and to physical injury were incorporated in the discussions.

No attempts were made to interpret misunderstandings in terms of Freudian psychodynamic theories.

Hypothesis

It was assumed that psoriasis is a biological response to awareness of injury, superimposed on an inherited trait and often triggered by minor, and usually local, skin injury, and that this response is inflammatory in nature "as if to heal" the skin. It is recognized that man's physiologic responses are limited in number, that he responds similarly, in general ways, to various noxious insults and that these responses are not always specific, appropriate or controlled. The assumption accepts the conclusion of all other investigators that psoriasis has not yet been proven to be due to viral, bacterial, mycotic, or parasitic invasion, or to chemical, thermal, meteorological or unusual physical trauma. It does not exhibit the characteristics of allergic reactions nor do these people appear to be emotionally, socially or economically much different from the rest of us.[23]

In an abstract sense, psoriasis might be a reaction to the sustained signal of awareness of injury in susceptible persons and it subsides when such signals subside.

CASE REPORTS

Case 1. On December 9, 1960, a distraught male was referred by a dermatologist because of severe depression, hypercorticosteroidism and acute inflammatory psoriasis. The entire skin was involved except for a small area 8 inches in diameter on the left thigh. He had been retired from his position with a national corporation, had accepted a disability pension, and was existing at home with his four motherless children. His life had come to a halt at age 47.

He was confined to bed most of the time and calculated the progress of his illness by the amount of dry scale that accumulated in and around his bed each night. The inflammatory effect of his skin prohibited complete closure of his eyes and he was unable to extend his joints because of joint swelling, skin contracture and thickening. He shuffled in a crouched position. His face was violaceous, his scalp thickly encrusted, clothing unkempt, and he carried with him the stale odor of dead skin. One could not interview this man without experiencing a mixture of heartache and repugnance. When he attempted to rise from the chair, he could only do so with help. After consultation he left a halo of skin chaff in the chair and on the floor. From time to time he would pick his skin, pull off scale, rub himself, blink nervously and stare straight ahead, his face a set, pathetic mask. He was tense, braced, restless and depressed and he had the appearance of a man who had been lost at sea on a raft for weeks and who expected to perish. He was unsightly, defeated, apprehensive, miserable and malodorous.

During the initial interview, bits of information indicated that his condition might be related to certain attitudes and was chronologically associated with significant life experiences. He was now unemployed and had only a small pension to support himself and the four children. Because of this, he was accepted as a patient without fee with the promise that he would return each week, cooperate and learn. Hypnosis was suggested immediately, anticipating that it would offer him mystical hope.

Early in the history, he mentioned that his father was 48 when he was born and his mother approaching the menopause. He described his father as a rigid Presbyterian minister who had been very active in his church and civic affairs, and who had never demonstrated much warmth, attention or approval. His early life was spent in intimate relationship with his mother who had been protective and who continued to be his companion until she died. He grew up believing that he must always please mother, and be directed by her, and that his father considered him a contemptible weakling of no promise.

Psoriasis began after an appendectomy when he was 13. It had been less troublesome after he married, and it had flared with the death of his wife from cancer three years previously. He had been celibate, virginal, loyal to mother, until age 36 when he married a woman with two children. She was the first woman he met after mother died. She was three years his senior.

He had been employed as a building inspector with a large corporation and had developed an avocation of architecture with a small practice in his home. He lived with the four children and had assumed all the duties of a woman keeping house. With the progress of his skin condition, he had relegated himself to bed and, although he could sleep well all morning, after the children left for school, his nights were spent in tossing torment, scratching and rubbing. In addition to the skin distress, he complained of general, deep muscle aching, swelling of the ankles, chills, and tachycardia. His appetite and his weight had remained constant. His most recent therapy had been courses of oral triamcinolone but he had stopped the drug because of fluid retention, and the psoriasis had become acutely inflammatory.

He was induced into a hypnotic state, with advice that it was for relaxation, and given post-hypnotic instruction to use self hypnosis at home for reduction of tenseness and for induction of nocturnal sleep. He was asked to begin daily walks out of doors and encouraged to meet life. It was suggested that he engage in his former hobbies and avocation.

On December 28, while under hypnosis, he was asked to mention one word associated with the onset of psoriasis—"Protest!—Against my father—he was too busy for me—too busy to pay attention to me—I wanted so much to be noticed—and approved." At this point he experienced profuse tears and abreaction. He told of being taken to Portland, Oregon, to a surgical specialist who removed his appendix, a remedy proposed for the abdominal pains he had been having for several years. When he awakened from the anesthesia, he asked for his father only to be told that father had returned home (300 miles) to attend to more important things.

When asked to talk about anything related to his current psoriasis, he wept. He talked incoherently about the "captain of the ship" and how he did not want to be captain. When his abreaction subsided he was able to discuss his reluctance to be in charge of his family and told how his wife had been the captain of the ship and had been steady, reliable and "in command."

On January 4 he was still troubled with insomnia but was able to rest during the afternoon using self hypnosis. Under hypnosis he talked about being taken from the breast early because his mother had a breast abscess and that he had choked on the blood. He rambled on to tell of an accident in which he had almost been trampled by a team of horses and of his mother's attack of hysteria following the incident. He told of his ambition to become an architect, and of his father's objection and insistence that he attend a liberal arts college that did not offer this training. He told of his piecemeal, limited, architectural education and his practice of architecture as a side line mentioning, "I guess I am one of those scab fellows." During this session he related many ideas and attitudes, ventilating lost hopes and desires, the deep feeling of his need to be someone—to create something.

The following week he talked at length about the headaches he had developed while courting his wife. Headache had become constant a few months after marriage. He had experienced them on Sunday but finally had "willed" them to appear on Monday. This weekly pattern was broken by her death and he had had few headaches since then. During hypnosis he talked about his failure to pass a speech course in college and said "my skin got me out of making speeches." He said he wished to make speeches and to influence people but that he felt inadequate. At the time of this visit, he no longer was depressed and his skin was visibly improved.

On January 8 his skin had improved remarkably but he was still plagued by insomnia. Under hypnosis he talked about his desire to sing, and how, early in his marriage while singing in church, his wife scolded him for singing off key. After that he stopped singing. "I haven't sung since." This was followed by a prolonged crying spell during which he wept over and over, "I want to sing, I want to sing, I want to sing."

The following week the skin had continued to improve. He discussed his wife and her depreciating attitude toward his architectural bent. He felt neglect following her death, but was proud that she had been a vigorous club woman, a leader in many organized women's groups and in charge of the family. He resented her leaving. In hypnotic state he talked at length about an illness he had developed in college. This illness, which was variously diagnosed and assumed to be undulant fever at one time, allowed him to drop out of school in his senior year when he was failing scholastically. It abated and disappeared eventually, after four months rest in a sanitarium.

During his stay in the sanitarium he had been treated by a program of progressive activity in which he increased the number of steps he walked each day, rested in bed and ate fresh dairy products. After release from the sanitarium, where his diagnosis had varied from myocarditis to neurocirculatory asthenia, he spent 18 months of careful, guarded activity in which he limited himself to four-block walks and afternoons in bed. He had been warned repeatedly that he was fragile and that any overactivity would send him back to the sanitarium. Interestingly, during this period of illness, he was supported by an $80 per month disability insurance policy (1930-1933).

By February 9 the skin had continued to improve. He had stopped using aspirin for joint pain and was walking eight blocks a day. The sleep pattern was improving but he still felt it necessary to return to bed after breakfast. He was cautious in instituting any new activity or responsibility. The skin of his thorax had cleared above the nipple level. In hypnotic state he ventilated feelings about his inadequate body build and, as a youth, his attempts to correct it by drinking copious amounts of milk. He discussed feeling rejected when a freshman in college, his inability to make friends, and related an incident in which his dormitory mates threw him in the lake because "I was a nuisance."

February 16 found the skin of the face almost clear, and his hands improving. He was walking more and had started construction of a birch bookcase. He discussed a period of thyrotoxicosis in 1953, which had followed an accident in which he had struck a young girl with his car. Following thyroidectomy, he had been depressed and had worried about insanity. He was off work three months at this time and finally achieved health by lying in the sun to get the "power of the sun." He talked further about his deep feelings of inadequacy and the picture of himself as a rejected person. While in hypnotic state he was asked to draw a picture of something related to the cause of his psoriasis. In deep, somnabulistic trance, he drew a picture of a sad, Franciscan monk. Asked to identify it, he printed his initials followed by "me—monk—similar to—away from the world—(initials repeated)—weak influence on people." His first name is that of a 13th century, canonized monk.

Each visit consisted of verbalization, while in hypnotic state, and discussion after awakening. These generally centered around his poor body image and incidents which had illustrated to him that he was repeately rejected by others.

By February 23 his hands had areas of normal skin, his back was clearing and the thick scale had disappeared from his scalp. He continued to return to bed after breakfast but remained only until 10 o'clock. He was now sleeping five of seven nights, comfortably.

On March 23 the skin was almost clear. A large patch of psoriasis remained over the left knee and there were small patches on the left chest and buttocks. The skin of the face was red, the capillary bed still engorged and somewhat cyanotic. The previously involved skin was thin and atrophic but appeared more nearly normal at each visit.

He continued to improve, and by March 29 was sleeping soundly all night, his scratching had ceased, and he was occupied all day. In hypnotic state he was asked to draw a picture representing a conflict. He drew a large castle with the drawbridge in place but the portcullis down. He said he was trapped inside the walls. He said he felt that if he could get out he could get well and not "need" his skin reaction. "I must make the effort—want to—have increased confidence—comes from increased successful activities—physical—mental—oral—manual—I feel I am succeeding in all but the mental."

He continued to improve and each weekly session included more and more encouragement to accept a better picture of himself. He was encouraged to change his attitudes and to venture more and more into former life activities. He continued to improve and on May 11 had a sparkle in his eye and exhibited an increased sense of humor, curiosity and aggressiveness. His next visit, two weeks later, found him tanned, alert, confident and poised. He was enthusiastic about his daily walks and was timing himself on his mile and a half jaunt which he was now jogging. He had a few small patches of psoriasis involving the left knee and a small patch on the buttocks. He spoke of returning to work on July 1 but felt he must be cautious and not return "too soon." He had occupied himself with a number of projects and hobbies, had taken several responsibilities in his church and, in addition to his daily road work, was doing calisthenics.

The next visit, a month later, preceded his return to work. His skin was clear. He was disappointed that he was not a new man in every respect but felt confident and aggressive. He returned to work on July 17 after examination by the company physician.

He has been seen quarterly since July 1961. In July 1962 he had experienced an atopic skin reaction of his arms when he had been unable to adjust to two conflicts, one financial and the other in trying to please a client with the drawings for an addition to a home. When these were resolved, the reaction subsided. In September 1962 he exposed and injured his hands while camping, developed an infection and had a moderate inflammatory reaction that subsided with antibiotic therapy. September 1964 found his skin normal except for chronic capillary engorgement of the face and exposed areas. The skin of the scalp tended to be dry and to flake but no actual lesions of psoriasis existed. In March 1965 he had a hemorrhoidectomy and developed a few small lesions on his elbows. He also reported that he was upset with his 13-year-old daughter. In July 1965 he developed an atopic reaction in his hands and observed that he found himself rubbing them continually. He was worrying constantly about his vacation plans, scheduling, and a fear that all would not go as planned. During the interview he rubbed and wrung his hands absent-mindedly while reviewing the problems of his proposed trip to the midwest. The trip was successful and he returned with normal appearing hands.

He was in the office in February 1966 when he referred his youngest daughter to me because of behavior problems. Oddly enough, she was rebelling against the home and society that lacked the protection and guidance of a mother, her own father's abandonment of her and her stepfather's inability to cope with the responsibilities thrust upon him.

In December, 1966, he reported feeling "just fine" and that he had no lesions. He was working steadily and enjoyed running three miles a day. His voice had the ring of confidence and enthusiasm.

He has made no attempt to engage in any heterosexual activity, confining his interests to his family, a careful savings program to insure security when he retires, and to his church, where at times he has served on three committees. He has had no time loss at work and his skin remains in better condition than it has been since age 13.

Case 2. This woman had suffered psoriasis since age 21. Lesions appeared shortly after wrecking her father's car, that she was driving without permission. She felt inadequate and was almost obsessed with the idea that she must not be like her mother, who had made her father's life miserable by nagging. She had become obese in effort to join her butcher husband in every way she could. Her husband is a heavy eater. Under hypnosis she expressed a deep desire to be able to wear pretty clothes and to have an attractive figure. When asked to draw a picture of something associated with her skin reaction, she drew the simple picture of a clothes hanger. She told of disappointment each time she shopped for clothes, usually bringing home her new dress only to go to her bedroom and weep. She felt completely defeated by her rotund figure. With ventillation, discussion, encouragement, muscle relaxation, exercise and diet, she reduced—and her skin, which was involved by angry psoriasis in the neck region, cleared in a few weeks. She was delighted and abandoned treatment.

She returned six months later, having returned to her former eating habit and weight, and having developed psoriasis on all four extremities. Her neck was acutely inflammed. Weekly visits were resumed and she was encouraged to control her food intake. She was able to again reduce her weight and dress size. The psoriasis vanished, leaving only small areas of atrophic skin. Later she resumed her former dietary habits because her husband insisted. She returned to her former size and shape, developed acute psoriasis of her neck, bosom and knees, gave up treatment and admitted failure to be what she wished to be. When last seen she was moderately depressed but did not wish to return.

Case 3. A 32-year-old woman was referred, by the patient recorded as case 2, March 29, 1962. She described an episode three years previously in which she had developed hives every Friday afternoon, while wearing an orthopedic collar for treatment of a "whip-lash" injury. She said the hives disappeared when the case was settled out of court and the cervical collar removed.

She had developed psoriasis, for the first time, just before the preceding Christmas. The disease involved the scalp and extremities. It appeared during a period of self-failure prior to Christmas when she blamed herself for jeopardizing her family's happiness by ordering all presents from a mail-order house that did not deliver them. She worked a 40-hour-week, supervised her home, cared for two children, and tried to be a perfect wife without a moment for her own recreation or pleasure. She expessed a deep feeling of inadequacy and felt unattractive as a woman when she compared herself to her beautiful, perfect mother.

Her skin cleared completely after hypnotic interview, explanation, encouragement and muscular training. She ceased believing that others did not like her and that people recognized her inadequacy and rejected her because of it. She learned to sleep again. She recollected a youth in which she felt completely rejected by her father and unable to compete with her mother.

Case 4. This woman was referred on April 2, 1964. She had developed psoriasis at age 16, in Norway. Her mother had died when she was 8. She was raised by an older sister and by people to whom she had been farmed-out. Psoriasis appeared during the time she was forced to leave school, and to forego her desire to become a teacher. Her first husband, a seaman, was repeatedly unfaithful to her, often ridiculing her when boasting about it. She remained with him until she could support her children. Her life, in general, had been one of toil and fustration. She had come to believe she had to be perfect to be approved by others. She was constantly alarmed by minor failures. The psoriasis had flared during the troubled times of her marriage, had subsided with each of four pregnancies and during the initial, romantic months of her second marriage.

She realized that she feared all authorities, worried constantly, was shy and sensitive, easily hurt, usually trembling when anyone was apparently displeased with her or shouted at her. She felt she must please everyone, reacting with alarm if she sensed they felt otherwise. She was seen April 13, May 6 and 19 and again on June 8, 1964. The last evidence of psoriasis had disappeared when she returned on June 22, 1964. The last area to subside involved the breasts. These lesions had been present since age 16 and had not subsided, even with pregnancy. She is now 42 and is able to live without fear for the first time in her life. She is happy, smiling and has begun accordian lessons, something she has wished for all her life. She no longer feels lonely and forsaken when her fisherman husband is absent for weeks, and she no longer tries to please everyone.

summary

Each of these people exhibited common psychological problems of inadequacy, anxiety, self condemnation and feeling of being threatened by ordinary life circumstances. Each was offered interest, support, counseling and instruction. Each was able to recall childhood impressions of abandonment by one or both parents and had developed deep feelings of inadequacy and fear of failure. Each learned to recognize and control excess neuromuscular activity and to develop more rational ways of coping with life situations. Each responded with improvement of psoriasis as he learned to manage his alarm and neuromotor efforts.

Case 2 was unable to choose between her own needs and those of her husband. Each time she abandoned herself, her psoriasis reappeared. Treatment reviewed here seems to have something in common with remission with other forms of medical treatment. Each of these people was offered something new and a sincere, personal interest by a new doctor. It differed in that each successful patient learned to manage himself with less alarm and less residual neuromotor activity and to adapt to the world more appropriately.

conclusions

Functionally ill individuals, conditioned to fear and alarm, with concomitant physiologic malfunction, can be reeducated and retrained by teaching methods, with improvement in homeostasis and adaptive responses.

Hypnosis can be an effective method for communication, recall, and for instruction. It seems to be a rapid method for identifying early, deeply imprinted experiences.

The most important healing agent in treatment of psoriasis is the physician, who offers protection and support, thereby decreasing alarm. His influence is more important than the agent he uses.

On the basis of these conclusions and the experience reported it is possible to construct a working hypothesis to be employed for further investigation:

1. Native human physiology does not readily adapt to sustained alarm, or residual neurometer effort. This excess activity within the nervous system, with its effect on organ function, is instrumental in altering otherwise normal adaptive responses.

2. Psoriasis represents a physiologic response that is simply too much of an essentially normal adaptive reaction. It is a physiopathologic reaction, exhibited by susceptible individuals, in whom excess physiologic responses are initiated by excess signals to produce epidermipoiesis. Alarm, when the child feels abandoned, is the sensitizing or conditioning stimulus. ■

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abstracto

Psoriasis no ha sido aún probada que sea debida a una invasión viral, bacteriana o parasítica, o a trauma químico, térmico, meteorológico o físico. Esta no parece ser una reacción alérgica y sus víctimas no parecen ser muy diferentes de nosotros en el sentido social, económico o emocional. Esta tiene las características de una reacción de adaptación y re-entrenamiento ofrece ayuda a esos que desean aceptar una instrucción cuidadosamente didigida. Cuatro casos ilustran la posibilidad. Uno era un incapacitado totalmente, medianamente envejecido, varón, ha estado totalmente mejorado por seis anos. Los otros fueron menos espectaculares porque fueron menos arruinados por la enfermedad pero todos respondieron favorablemente durante el tiempo que siguieron el tratamiento en e que se empleo reentrenamiento solamente y no se uso medicación.

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Thymic Arrest Tumor

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Thymic arrest tumors are seen infrequently and are usually diagnosed, before operation, as branchial cleft cysts. They arise from the third pharyngeal pouch. Position and configuration vary within limits imposed by embryologic development of neck structures.

Thymic arrest tumors are usually diagnosed as branchial cleft cysts, with differential diagnosis including lymphoma, cystic hygroma and, possibly thyoglossal duct cyst. They can occur at any location at which branchial cleft cysts appear. This can be easily understood in view of its embryological development.

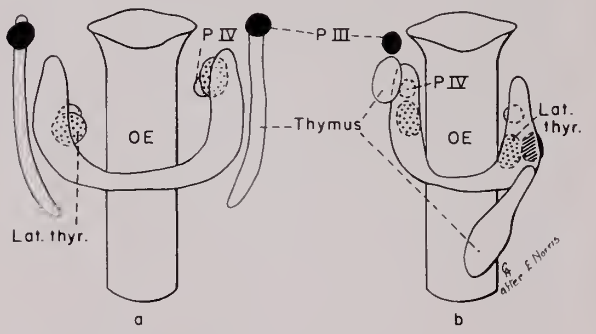


Fig. 1. Diagramatic origin and descent of thymus. The figure on the right shows a later stage of separation of the thymus; it is descending after the parathyroid (3) has separated.

Embryological development of the thymic gland has been clearly discussed and described by Norris.[1] As seen in figure 1, the thymus developes from the posterior medial portion of the third pharyngeal pouch; remaining portion of the pouch gives rise to parathyroid III. Normally, the thymus forms at the sixth week and fuses anteriorly at eight weeks. It then descends into the mediastinum. Parathyroid III usually sparates at the 20 mm stage, but may remain attached and be found anywhere along the course of descent of the thymus.

After the 18 mm stage, rapid growth of the neck plus greater bulk of the caudal portion of the thymic gland causes descent of this portion and its attached parathyroid III. This explains why parathyroid III lies lower in the neck than parathyroid IV.

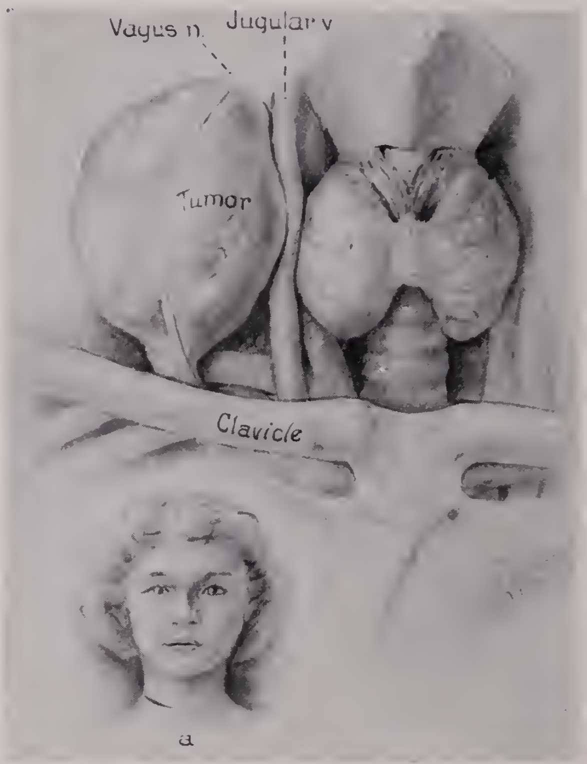


Fig. 2. Note the surgical findings with the vagus nerve passing anteriorly and the jugular vein and carotid artery compression medially.

Abnormalities can be understood by considering possibilities of abnormal descent. Weissman and Smith reported a case of fused accessory thymus causing obstruction that barely permitted passage of a probe through the larynx.[2] Mosely and Som discovered a fused thymus at the suprasternal notch in a 21 month old child.[3] Pirkey presented a case of epithelioma arising from the epithelial reticulum and Hassall's corpuscles in an undescended thymus.[4] He described four categories of tumors arising from thymic ele-

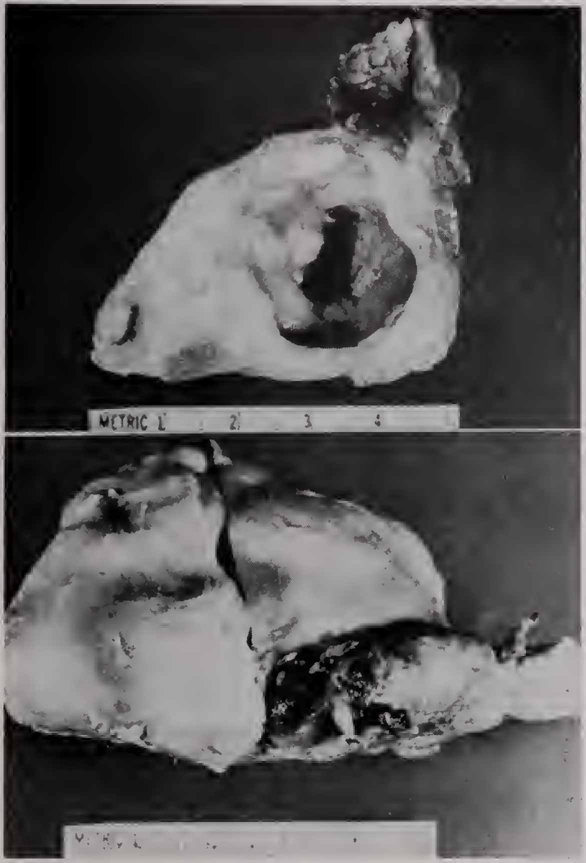


Fig. 3. Gross pathological specimen shows cystic degeneration, fingerlike thoracic inlet extension and indentation of carotid artery compression.

ments:[4] parathelioma arising from connective tissue of the vascular walls; lymphosarcoma, from the lymphocytic elements; epithelioma, from the reticulum and Hassall's corpuscles; and Hodgkin's disease. Arnheim, et al, described a combined cervical-thoracic thymus, displacing the trachea, that was visible on x-ray.[5] Laage and Hellman mentioned a case of a malignant pedicled tumor of the thymus causing obstruction within the trachea.[6]

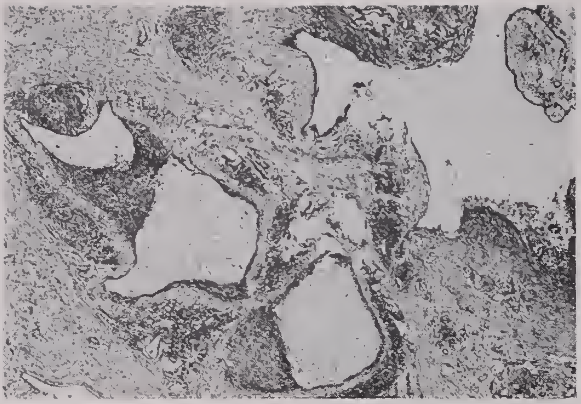
Gilmour presented a study of thirteen postmortem cases. There were seven cases of thymic tissue within the thyroid gland. Four cases showed partial, left-side descent of thymus III; all had combined neck and mediastinal tumors. There was one case of unilateral hypoplasia with the opposite enlarged thymus crossing over into the thorax from the side of the orgin. One case showed bi-lateral hypoplasia. It was noted that several of these had abnormal parathyroid locations.

A previous microscopic study of embryological specimens revealed 121 parathyroids, of the 175 found, located below the thyroid and lying in thymus III, or within its involuted remains.

CASE REPORT:

A nine-year-old, white, female had been observed to have a lump in the right neck, at the age of six. At that time her parents were told to wait until she was older to have it removed. Recently, because of enlargement and some pressure symptoms, she was taken to a local physician who recommended removal.

Past history and family history were noncontributory, and the mass was essentially asymptomatic. The mass measured approximately 8 by 5 cm. It was not freely movable, and no bruit could be heard. The mass was firm but not hard. It did not move with swallowing. There were no unusual lymph nodes in the neck. The thyroid was normal. Chest x-ray was negative. Preoperative diagnosis was branchial cleft cyst. The mass was present in the right neck, anterior and deep to the sternocleidomastoid muscle. It was rather firm and lobulated, and felt more like a lymphoma than the usual branchial cleft cyst. Because of its large size, partial division of the strap muscles was necessary to allow delivery of the mass, which bore a tube-like appendix



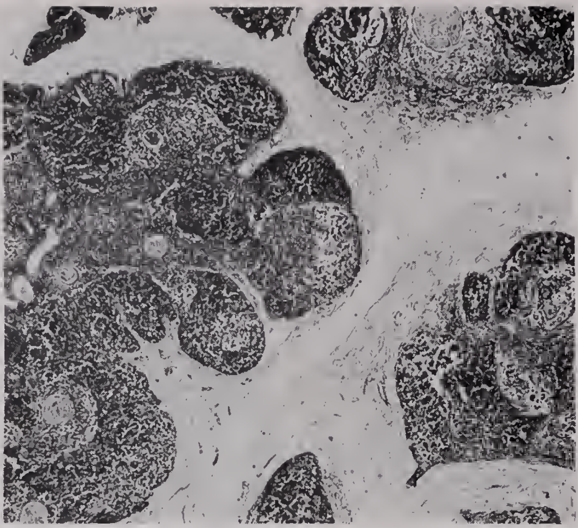


Fig. 4 and 5. The microscopic findings are those of typical thymus tissue with large lymphoid follicles and Hassall's corpuscles. Fig. 4, (above), x 15; Fig. 5, x 19.

about the size of an adult index finger, extending into the right mediastinum. The vagus nerve had been pushed laterally by the mass. It was my impression, during surgery, that this might be a neurogenic tumor, possibly arising from the sympathetic chain. This would have explained the extension into the mediastinum. However, Horner's syndrome had not been observed pre-operatively. Figure 2 shows the operative findings.

The mass was removed by blunt and sharp dissection, dividing the mediastinal extension at the clavicular level. It was felt that no further surgery was indicated until a more definitive diagnosis was made, after which a chest approach might be indicated, depending on pathologic findings. The child had an uncomplicated post-operative course, and was discharged four days after the operation.

The tumor measured 7 to 8 cm in length and 3 to 4 cm in thickness with a tubular extension 4 cm long and 1 to 1.5 cm in diameter. Cut surface revealed gray-white fibrous walls with cystic cavities and many focal areas with caseous material within cysts. There were heavy deposits of cholesterol crystals.

Microscopic findings included cells representative of Hassall's corpuscles, with cholesterol crystals, giant cells, and histiocytes, deposited in the fibrous walls of the cysts. One small, cystic cavity was surrounded by lymphoid deposit. Small cysts showed cholesterol crystals with foreign body giant cells. Normal lymphoid pattern was seen in some areas. Pathologic diagnosis was cystic thymic anlagen. See figures 3, 4 and 5. ■

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abstracto

Tumores de timo residual se ven infrecuentemente y generalmente son diagnosticados antes de la operación como quistes de hendiduras branquiales. Tienen su origen del tercer saco faríngeo. La posición y configuración varían dentro de los límites impuestos por el desarrollo embriológico de las estructuras del cuello.

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The Congenitally Malformed

XI Mental Retardation

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The primary physician who delivers a Mongoloid child and must counsel the parents, or who is called to treat a child failing in school, fully appreciates the conflicts these situations create.[1] In terms of magnitude, mental retardation is the most handicapping of all childhood disorders. At some point in their lives, more than five million people in our country are considered to be retarded. Each year 126,000 children are added to this already staggering number. A much larger number of persons probably function ineffectively throughout life and are never identified.[2]

Mental retardation can be considered very really a national problem, because in some way, directly or indirectly, the problem will affect all of us. The President's Panel Report to President Kennedy in October, 1962, has clearly defined the responsibility of the medical profession in early detection of mental retardation and planning for and obtaining optimal care for the mentally retarded.[3] The physician's role must be adapted to the multifactorial nature of the problem, including collaboration with allied disciplines and other professions in order to provide the best treatment for the child as he matures. Our present understanding of mental retardation suggests that it is a *symptom resulting in limitation of achievement,* due to biologic, socio-cultural and psychologic factors interacting in a very complex manner. The primary physician, confronted in his examining room with a child who has mental retardation, is dealing with just as subtle and complex a problem as that of open heart surgery. His management of the situation requires the creative insights of the man in immediate contact with the realities of day-to-day practice. Any retarded child presents an individual set of problems requiring individual solutions. Yet, that child may not be much different than a slow learner or a child with an emotional problem. The physician must be in the position of extending his knowledge regarding normal processes of growth and development to all children, including the mentally retarded.[4]

All representatives of the community health team may not establish contact with every family during the first year of the child's life but physician contact is universal. Alertness of the physician may permit identification of the retarded child years before diagnosis may otherwise be made, and make possible the beginning of helpful therapy that may modify or reverse the course of the disorder. Early identification is very important in socio-cultural deprivation where enrichment of a child's environment, beginning early enough, may save the child from a lifetime of handicap.

The physician who serves as an informed family counselor throughout the child's formative years, performs a vital and unique role by his referral to appropriate community services.

Current emphasis is to aid the retarded so that they may enter the community. The physician does more than contribute to the life and the well-being of the individual. He helps to increase the status of the retarded person as a more human and a less threatening member of society, and society accepts more fully its responsibilities to the retarded, making his future brighter. The overall health, happiness, and success of the retarded child will always depend on the devotion, knowledge and skill of the primary physician in his relationship to the family and in dealing with other professional groups and agencies in the community.

diagnosis

The diagnostic process is concerned with implications of specific causes and understanding their etiology, a realistic prognosis and comprehensive program of care, treatment and training. Diagnostic study and subsequent treatment of the mentally retarded often call for help from many medical specialists when there is coexistence of multiple handicaps. The professions of nursing, education, psychology, and social work help to perform vital diagnostic and treatment functions.[5]

diagnosis by identification

Diagnosis begins with identification. The primary physician is the key person in the community health service team because of his function as a case finder. Usually the most severe and recognizable forms of mental retardation are diagnosed early. Ten to 25 per cent of all retarded individuals have obvious impairment and will ultimately be classified as severely, profoundly, or mildly retarded with I.Q.'s below 50. Causes are often not treatable, but early diagnosis may prevent further brain damage and early symptomatic treatment may produce amelioration of the disability.[4]

Another group, including 75 to 90 per cent of retarded children, have I.Q.'s above 50. These children may be identified by the physician, but often are not recognized until they are of school age and then are referred to the physician for further evaluation. These children usually appear physically normal, but are retarded because of familial, cultural or socio-economic factors. These children are educable and remain in the community. They join the skilled and semiskilled labor force, make a good adjustment and their identity as retarded is often lost.[4]

diagnosis by causation

The process of identification may be approached in different ways. One approach is through causation. These causes originate from biological factors which influence the organization of the neuro matrix or from experiential factors which organize behavioral functions beginning at birth.

Biological and experiential causes are interrelated, with one assuming a primary role, the other a secondary influence. If the physician cannot modify the primary cause, he may therapeutically intervene at the secondary level and enhance the adaptive capacity of the child. If certain biological syndromes are diagnosed, one assumes a definite probability of mental retardation exists, for example, in Hurler's disease.

Disability in 25 to 35 per cent of children diagnosed as having mental retardation can reasonably and certainly be linked to a known cause; of these—75 to 80 per cent are thought to be due to prenatal factors, e.g., familial constitutional predisposition, other inborn errors of metabolism, cerebral malformations, maternal infections or the effects of drugs taken by the mother while the child is in utero. Ten per cent of known causes are the result of perinatal anoxia, birth trauma and cerebral hemorrhage. Finally, the last ten per cent develop mental retardation from acquired lesions of brain such as cerebral infections (meningitis; encephalitis) brain tumors, cerebral trauma, cerebrovascular accidents and post natal anoxic episodes.[2, 19]

The physician's responsibilities to diagnose biological causes are: 1. to prevent the primary disease process through early diagnosis; 2. to diagnose deviate development early in the child's life and attempt to relate the developmental problems to known causes and, 3. to ferret out biological causes in children referred from nonmedical sources.[4]

The physician's responsibility to diagnose behavioral mental retardation is not as clearly defined. He should be aware of the lack of sensory environmental stimulation to the young child in the first six months of life. He should be interested in determining if there is any distortion in patterns of maternal care, including neglect or maltreatment, and he should be particularly aware of the lack of a mother figure, as might be seen in a child reared in an institutional setting. The lack of cultural stimulation found in the lower socio-economic group presents a type of deprivation which may be reversed, when found early in the child's life, through programs like *Project Head Start.*[20]

diagnosis by age

Affected children under 1 year of age are often diagnosed by the presence of an obvious physical deformity such as seen in Mongolism or hydrocephalus. More severe intellectual impairment may be the rule. First awareness of delayed neonatal development may be realization that the newborn infant has failed to cry or has a weak cry, has failed to nurse properly or has failed to exhibit normal reflexes. Failure to thrive, prolonged crying, environmental episodes not relieved by feeding or comforting, and lack of awareness by 2 to 4 months of age, alert the physician to the possibility of mental retardation in the neonate and young infant.[21-23]

The mildly retarded often go undiagnosed

Table 1

Causes of Mental Retardation
Responding to Treatment[8-18]

Disease	Clinical Signs	Diagnostic Test	Therapy
Phenylketonuria	Eczema Blue eyes Blond hair	Positive urine ferric chloride test High serum phenylalanine	Low protein diet Lofenalac formula
Leucine intolerance	Convulsions in neonatal period	Low blood glucose within 30 minutes following protein feeding	Low leucine diet
Pyridoxine dependency of newborn	Convulsions beginning shortly after birth	Abnormal EEG—diffuse spike and wave discharges	Continuous pyridoxine therapy
Cretinism-hypothyroidism	Failure to thrive lethargy; low body temperature Prolonged physiologic jaundice	Low PBI Low BEI	Dessicated thyroid, increasing doses
Hypercalcemia	Elfin face Failure to thrive Gastro intestinal signs Supra-valvular aortic stenosis	High serum calcium on repeated determinations	Initially cortisone Elimination of vitamin D in diet Decrease oral calcium intake below 100 mg per day
Galactosemia	Cataracts Hepato-splenomegaly Jaundice Growth retardation	Reducing substance in urine Red blood cell assay for gal-1-P uridyl transferase	Formula: Nutramigen galactose free diet
Hypoglycemia of newborn	Jitteriness Limpness Twitching High pitched cry	Sequential blood glucose values under 30 mg per 100 ml—at least two determinations	IV glucose initially then oral glucose feedings Steroids—as indicated

during the first year of life. Diagnosis in the preschool years usually depends upon delay in developing language, learning to walk, and difficulty with habit training. Impairment of coordination may also signify mental retardation. Inability to play properly with toys, suggesting simplicity of play patterns, lack of imagination, and tendency to choose younger playmates may all point toward mental retardation. In the school years, the mildly retarded may be discovered. Their academic failure or mal-behavior in the classroom, such as increased aggressiveness, negativism and withdrawal, may be the signifying features of mental retardation.

diagnostic methods

History. The history is of prime importance because it asks questions regarding psychomotor development, social interaction, and medical causative factors.

Developmental data. Parents provide recollections of the child's developmental landmarks and relationships with siblings and peers. They may document the child's delay in reaching normal developmental landmarks particularly in the areas of habit training and coordinative skills. Quality as well as quantity of vocabulary is highly correlated with individual intelligence. Underdeveloped comprehension and speaking vocabulary may be the single best index of mental retardation in a child with normal vision and hearing.[4]

As a guide for comparison, McIntire, et al., have described five types of normal activity as demonstrated at ages 2 to 6.[24] The activities are block building and counting; drawing of persons; drawing of geometric forms; verbal expression; and verbal comprehension.

By 2, the child places ten blocks in a cup (18 months), builds a three block tower, starts spontaneous scribbling (18 months), makes deliberate strokes distinguishable from scribbling, uses words singly, in phrases and short sentences, and words are 65 per cent intelligible in context, and on hearing the words, points to his own hair, feet, eyes, nose, hands, ears, mouth (one correct at 18 months, four or more correct at age 2).

By 3, builds a three-block pyramid, drawings are rarely recognizable as human head or figure, may draw circle head only, copies a scribbled circle (2 1/2 years) copies a circle at 3, verbalizes sentences, gives full name and own sex, words are 70 to 80 per cent intelligible in context, names common objects in room (pencil, chair, shoe, telephone, book, paper); can answer "What do you do with it?" (three of six items).

By 4, counts two blocks, most commonly includes heads, legs and eyes in person drawing, copies a cross, names one of four colors (red, yellow, blue, green) counts up to three common objects (penny, key, shoe, pencil, knife, ball) speech is usually 90 to 100 per cent intelligible in context, answers correctly "What do you do when you are hungry?" "What do you do when you are sleepy?"

By 5, builds a six-block pyramid, in person drawing commonly shows six items, including trunk, nose and mouth, copies a square, language is essentially complete in structure, speech is intelligible in context but sounds may be faulty, counts one to 10, names colors, knows common coins, knows own age, distinguishes morning and afternoon, defines words, key, dress, bed (two of three).

By 6, can count blocks when shown groups of 3, 9, 7, 5 (3 correct), commonly shows nine items in person drawing, including fingers and simple representation of clothing (buttons, hat) copies a triangle, intelligibility of speech is good although a few sounds may be faulty, names days of week in correct order.

Social interaction. In performing the actual evaluation, the observant physician notes family interactions and their affect on the child's behavior. He may also detect evidence of maternal deprivation, lack of environmental stimulation, and signs of social or economic deprivation.

Medical history. Another important part of the history taking process concerns the adequate assessment of the family history in gathering significant genetic information. If a definite pattern of inheritance can be established for a certain type of mental retardation, a fairly accurate prediction of chances for that condition in question to occur again can be made to the parents.

The doctor explores the fertility history of the mother and experiences of the mother in pregnancy, history of the labor and delivery and the significant aspects of the early life of this child, such as infections, diseases, and accidents. He also estimates the presence or absence of seizures, behavior patterns, disturbances, progressive development, or neurological deterioration.

physical examination

The physical examination is a record of developmental observations by the physician at that single moment in time. These developmental evaluations are compared to norms for the age and serve as a form of intellectual assessment. In addition, the recording of these abilities serves as a useful baseline measurement to be compared with future assessments. Careful recording and periodic assessment of the child's developmental landmarks enhance the physician's ability to first of all identify the retarded and secondly, to proceed with further diagnostic studies and eventual treatment.

In the very young infant, an experienced awareness of patterns of neuro muscular development gained through repeated examination of normal infants and children provides a solid background of developmental understanding in order to better evaluate the suspected neurologically damaged infant. A number of authors have published methods for categorizing and evaluating expected neurological development in the normally maturing child.[22-24]

Apgar's scoring chart uses classes 0, 1 and 2. In class 0, there is no detectable heart action, no respiratory effort, muscle tone is flaccid, there is no reflex response to irritation and color is pale blue. In class 1 the heart rate is less than 100, respiratory movements are slow, there is some flexion of extremities, stimulus produces a grimace, the body is pink and the extremities blue. In class 2 the heart rate is more than 100, there is good respiratory effort and crying, there is active use of muscles and stimulus produces a cry, the body is completely pink.[24, 25]

Neurological examination, in the older child, may reveal impairment of performing skilled acts, intention tremor, choreorathetosis, difference in size of extremities or hemi hypogenesis

Table 2[1]

High-Risk Infants

I. Family History

- Presence of mutant genes
- Central nervous system disorders
- Allergy
- Low socio-economic group

II. Medical History of Mother

- Diabetes
- Hypertension
- Radiation
- Short stature
- Cardiovascular renal disease
- Thyroid disease

III. Previous Obstetrical History of Mother

- Toxemia
- Miscarriage immediately preceding pregnancy
- Size of infants

IV. Present Pregnancy

- Maternal age (less than 16 or more than 38)
- Multiple births
- Polyhydramnios
- Pyelonephritis
- Oligohydramnios
- Medications
- Radiation
- Anesthesia
- Diabetes
- Toxemia
- Fetal maternal blood
- Group incompatibility

V. Labor and Delivery

- Prematurity
- Postmaturity-dysmaturity
- Precipitate, prolonged or complicated delivery
- Low Apgar score—5 minutes

VI. Placenta

- Massive infarction
- Amnion nodosum
- Placentitis

VII. Neonatal

- Single umbilical artery
- Jaundice
- Head size
- Infection
- Convulsions
- Failure to regain birth weight by 10 days
- Manifest congenital defects
- Disproportion between weight or length and gestational age

suggesting possible parietal lobe damage, impaired appreciation of double simultaneous sensory presentation, abnormal after the age of seven, awkwardness in performing rapid alternating movements, impairment of large muscle coordinative motor movements, and unilateral or isolated reflex abnormalities.[4]

Observation of morphological clues may lead to diagnosis of biological syndromes. Measurements of occipital frontal circumference are important in determining if macrocephaly or microcephaly exist. Specific facial features may reveal facial disproportion or typical facies such as one sees in Down's syndrome. The eyes are an extension of the central nervous system so that, in addition to evaluating visual acuity, the eyes should be examined for evidence of many different diseases, e.g., Tay Sach's disease. Abnormalities of external car configuration may serve as a warning to look for renal development anomalies. Hepatomegaly may suggest metabolic disorders such as Hurler's disease or cytomegalic inclusion disease. Eczema may suggest the diagnosis of phenylketonuria. Dermatoglyphics may be abnormal if congenital malformations exist and will usually show an increased frequency of simian lines, bilateral distal axial triradii, single flexion creases and radial loops on other than the second digit. These findings are considered non-specific indicators of altered embryonic development and are not diagnostic for a given syndrome.[27, 28, 29]

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[1] From the proceedings of The White House Conference on Mental Retardation, Airlie House, Warrenton, Virginia, September 18-20, 1963. Published by the U.S. Department of Health, Education, and Welfare for the Office of the Special Assistant to the President for Mental Retardation, p. 99.

laboratory studies

Special laboratory procedures. Generally no routine laboratory studies are indicated except, possibly the urine test for phenylketonuria using ferric chloride solution or Phenistix.

History and physical examination should lead to tentative diagnosis which then suggests that certain laboratory studies would be helpful to confirm the suspected diagnosis.

Other tests commonly used when searching for answers include: 1. two dimensional amino acid thin layer chromatography on a 12 or 24-hour urine collection, looking for an aminoaciduria, and 2. appropriate x-rays of the skull and centers of ossification for bone age or for suspected abnormalities.

The EEG is a helpful ancillary diagnostic tool when other neuropathological conditions associated with mental retardation are thought to be present. Contrary to popular non-medical opinion, the EEG does not correlate well with intellectual ability.

tests by others

Psychological study, rather, serves as a method for more accurately measuring each child's particular intellectual strength and weakness and may objectively separate and quantify to what extent intellectual deficits and emotional problems interact with the child's social and cultural environment to produce mental retardation.

Accepting the single I.Q. number as the final determining factor in the diagnosis is dangerous because the number that results represents an averaging of abilities. This single score may commit the child to an educational program that may be either above or below his true potential.

A trained social worker, skilled in working with parents of retarded children is very useful in the diagnostic evaluation in determining personal and social needs, as well as possible etiological factors in the dynamic interrelationships among the family members. The social worker may serve as a person knowledgable about community resources available to the retarded.

Nurses having special knowledge in the field may function in a diagnostic and liaison capacity with the visiting public health nurse working in the field. The visiting public health nurse may be of great value in carrying out the physician's instructions in the home and helping the child's mother with development of self-help skills.

If the child is going to school, an educational progress report from the school is of utmost importance, both for the psychologist and for the primary physician's understanding and interpretation to the parents. At the same time the doctor can inquire regarding the availability of appropriate educational placement in the patient's own or adjacent school systems.

Speech and hearing evaluation may be necessary in order to ascertain what the child's vocalization and level of language function is and to determine if speech therapy is indicated.

The doctor may call upon the diagnostic and treatment services of the Elks Traveling Physical and Occupational Therapist, either the state or national representative. These specially trained professionals serve as an extension of the physician's influence into the home, where practical and pertinent diagnosis and treatment plans can be made. The therapist serves as a resource person for periodic reports of the child's progress.*

CAUTIONS[4]

Often mental retardation cannot be clearly defined. A seemingly retarded child may really be suffering from a defect in vision or hearing and conversely, all children with conditions commonly known to produce mental retardation may not be retarded, e.g., hydrocephalus, phenylketonuria.[30]

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*Information on the service provided by the Elks may be obtained from Mr. Frederick Simpson, Box 246, Newport, Oregon, phone (503) 265 2701; Mr. Chester E. Hawes, 3019 6th Avenue East, Renton, Washington 98055, phone (206) 255 4290; or Mr. Chester F. Stahl, 619 Bannock Street, Boise, Idaho 83702, phone (208) 385 2225.

Another caution, diagnostic haste may lead to therapeutic waste by inaccurately labeling the child. Mental retardation is an atypical crisis usually not calling for immediate diagnosis and treatment. Combined anxiety of the family and the physician concerning the diagnosis may precipitate action leading to premature diagnostic prediction and prognosis.

Support to the family during the period of diagnosis is most important for the duration of the evaluation and subsequent treatment. A slow, deliberate, diagnostic period of grace is necessary to permit careful gathering of data. This time allows both the parents and physician to agree on a diagnosis and helps minimize diagnostic shopping by the parents. This period of time also permits the development of mutual confidence and rapport between the family and physician making ultimate decisions easier and producing an ongoing relationship necessary for the optimum management of the retarded child.[31,32] ■

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Family Conflicts and Aging

Psychodynamics of the Aging Process

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A family usually includes individuals of three generations and is subjected to conflicts arising from differing needs of the three. The geriatric patient may have deficiencies due to tissue atrophy, deficit of what Selye calls adaptation energy, or failure to accept aging as a natural process. Interactions causing disturbances within the family are, to some extent, unavoidable. Rejection or isolation of the elderly lead to ambivalence and, occasionally to depression. Rise of juvenile delinquency has been attributed to lack of respect for elders, and failure to utilize the contributions they can make. We should study, and make use of, the assets and capacities of older persons. They can contribute experience, wisdom, objectivity, and serenity, all of importance to more satisfying family life.

1 *The Family*

Before dealing directly with the issue of family conflicts and aging, let me give you some of my thoughts about the institution of the family itself. The family is the key unit of our culture. Its nature and stability determines the nature and stability of our American culture itself.

In our culture, the family typically consists of three generations — children, parents, and grandparents. Many studies have shown that each of these age groups—generations—has its own purpose, goals, and values. And yet, for the sake of the emotional health of each member, and the existence of the total culture, they must share in at least one value, the conservation of the family itself. This must be done in such a way that the esteem and respect of each member is maintained and the process of self-growth is emphasized.

Conflict between the generations will arise and can lead to intense feelings of ambivalence and hostility and can actually destroy the harmony of the family, temporarily or permanently. This inevitably will lead to much emotional upset of all family members and, therefore, of culture itself.

Psychoanalytic theory and experience has much to say about these processes. For one thing, we must consider the roles each generation in the family should play for maximum mental health and stability. The children's normal role is one of dependence in regard to physical, economic, social, intellectual and emotional development. The key dependency relationship is that of consistent and continuous love among all family members. Without it, the child will grow up confused, insecure, and emotionally disturbed. The parent of the same sex is needed to supply the identification figure. The Oedipus complex has to be worked through. The path from dependence to independence is frequently blocked with obstacles which must be reversed or overcome. This is always done with the parents or parental symbols serving, consciously or unconsciously, to the child, as his model. The child must be helped by the family to grow toward adult independence. If not, the child will remain fixed in the early phase of psychosexual development or will regress backward toward immaturity under stress.

maturity

In contrast, the way of life of the adult is characterized by the attainment of the maximum level of independence. Maturity is closely related to independence and can be defined as follows:

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1. The constructive drives will be greater than the destructive ones (Karl Menninger).[1]

2. The mature adult will be capable of overcoming a wide range of frustrations and stress without being deeply disturbed.

3. Adjustment will be good within family life, the chosen field of life work, and in the many facets of community living.

4. The individual will reach the highest level of psychosexual development with libido directed toward the heterosexual partner (Freud).[2]

In all of this, the role of the grandparents is not clearly defined. We need much research in this critical area, since the older person has his own problems, liabilities and assets, which cause conflict or strength in the family unit.

Streib and Thompson suggest two reasons for disturbed relationships between the younger and older generations. These are: 1. friction over the rearing of children and, 2. differences over the perception of the aging process itself with the older generation having more overt and clearer recognition of aging.[3] Frequently, the sheer contrast in health and vigor among the three generations reinforces the older person's awareness of aging.

friction

Davis pointed out, in 1940, that a certain amount of friction between generations is a universal phenomenon. He described three variables, found in most cultures, that tend to produce conflict between parents and children: 1: the age or birth-cycle differential between parent and child. 2. the decelerating rate of socialization with advance age, and 3. the intrinsic differences between young and old on the physiologic, psychosocial and sociologic planes.[4]

An interesting study was done by Yarrow and associates on social psychological characteristics of old age. These investigators emphasize that the aged family is not as familiar in research as the young family and that data and concepts derived from research on the latter cannot be directly transferred to the former.[5]

According to these authors, data are especially needed in regard to the following problems: What roles does the aged individual take with his peers and with younger adults? How, in concrete form, does the older person attempt to control others, to maintain his independence? What is the interplay between the psychological and the mechanical aspects of behavior, such as the older person's more limited locomotion, restrictions placed on him in the use of a car, visual and auditory dysfunctions? We clearly need data as well as the methodology.

2 The Geriatric Patient

With this background material, let me now tell you of my own perception of the geriatric patient. It is based on my many years of experience as a psychiatrist treating elderly persons with emotional problems. I have learned that we must redefine and broaden the concept of the geriatric patient. Only when we learn more about the various problems of the elderly generally, and the geriatric patient specifically, can we come to a better understanding of the true nature of family conflicts connected with the older generation.

The definitions used at the present time vary greatly. They depend on the background and training of the gerontologist. All gerontologists, however, agree on one point: The aged patient should not be defined according to chronological age. One person can be considered a geriatric patient at the age of 40 and another not a geriatric patient at the age of 75. It is not the disability that marks the geriatric patient but the combination of biological phenomena, values of our culture, and personal attitudes. Birren,[6] myself,[7] and others, point out that the geriatric patient has to be understood in his totality. He represents a biological, sociological and psychological entity and will show combined features of the following three variables:

A. *Biological Components.* The biological variables of the geriatric patient have been investigated by many workers but still represent a great problem. There are many research-derived theories by well known biologically oriented gerontologists. Two of these merit special attention:

Shock attributes great importance to the factor of atrophy of the cells, especially of the brain cortex and the musculature.[8] He believes that a large proportion of muscular atrophy is due to disuse. He bases this on observations of athletes who do not show atrophy of those muscle cells that are in continuous exercise. Shock, consequently, emphasizes the factor of motivation. However, physical conditioning and restoration of the functional capacities by progressive exercise has yet to be systematically investigated. Nonetheless, this certainly points toward a positive therapeutic approach in geriatrics. A simple practical way of gradual rehabilitation and prevention of atrophy through lack of use is by suitable exercise. Indeed, this method is well known and is used extensively in physical medicine and rehabilitation centers all over the country.

Selye, in contrast to Shock's motivational theory, gives greater importance to the factor of wear and tear.[9] His theory is published in his book, "The Stress of Life." Selye states that true age depends largely on the rate of wear and tear, on the speed of self-consumption. To him, life is essentially a process that gradually spends the given amount of adaptation energy that we inherited from our parents. Vitality, to Selye, is like a special kind of bank account which the person can use up by withdrawals but cannot increase by deposits. The person's control over his most precious fortune is the rate at which withdrawals are made.

The solution is evidently not to stop withdrawing, for this would result in death. Nor is it to withdraw just enough for survival, for this would permit only a vegetative life—worse than death. The intelligent thing to do is to withdraw generously but never to expend wastefully. Selye stresses the falsity of the belief in complete restoration by rest after exposure to very stressful activities. Experiments with animals have clearly shown that each exposure to stress leaves an indelible scar because the animals are using up reserves of adaptability which cannot be replaced.

It is true, according to Selye, that immediately after some harassing experience, rest can almost restore the organism to the original level of fitness by eliminating acute fatigue. But the emphasis is on the word *almost*. Since we constantly go through periods of stress and rest during life, these little daily deficits of adaptation energy summate. They add up to aging.

B. *Sociological Components.* It is important that the elderly person properly solve his special problems of family, occupation, environment and community life. These may be catergorized into the following three major problems:

1. Retirement problems are the ones most frequently precipitating emotional upsets, in elderly people, that lead to hospitalization. Older people who, in their earlier years, have not developed hobbies, or widened their interests, are unable to occupy their time and their minds satisfactorily after retirement. Consequently, they are not able to relax and enjoy life. Too much leisure time makes them feel useless and superfluous, causes them to concentrate their interest on their physical status, leads to many psychosomatic complaints, and terminates in depression. Retirement often causes a severe loss of self-esteem. Many old people have for years held their minds and bodies together by compulsive work. They simply are not used to relaxation. Not knowing what recreation means, they have, in later life, a complete breakdown of physical and mental health, accompanied by sudden and severe confusion and disorganization. They are really lost in the true and symbolic implications of the word.

2. Our cultural attitudes affect the emotional and physical health of our older citizens. Our century is the century of the youth. We are all impelled toward social and economic goals and are driven by an unresistable force to achieve them. Therefore, too many of us work compulsively and strenuously to improve and maintain our social positions in a world of continuous competition. Thus, as the end of life approaches, we are exhausted and have the feeling we have not really lived at all. To the young person living in such a world of tension, of compulsion, of work and, of competition, elderly people, including their own parents and grandparents, are considered a burden. They know it, they feel it, and are unhappy and dejected. Elderly people having been raised with the same values are caught in this morass and cannot extricate themselves.

3. Many of our older persons experience great economic insecurity and must be supported and protected by the culture. Medicare, social security and public welfare are important programs. But, they should be administered and given in such a way that the elderly recipient suffers minimal loss of self-esteem.

C. *Personal Components.* The older person, in contrast to the emotionally disturbed adult, frequently shows characteristic psychological features.

1. Some of these problems stem from increased dependency needs of old age. Senior citizens become dependent on others: economically, socially and medically. Their dependence may be intensified by their difficulties in concentration, decreased attention span, and memory defects. These factors may cause severe loss of self-esteem especially when features of a more rigid character, of a certain lack of

adaptability and flexibility, were previously present. Problems of their physical health frequently increase their dependence needs (emphysema, chronic arthritis, arteriosclerosis and others). Physical sicknesses and their prevention play a great role in old age. These have been described in the textbooks on geriatrics written by Stieglitz,[10] Thewlis,[11] and others.

2. Many elderly persons never fully accept their own aging as a natural process, nor do they learn to live with it. They consider it severe trauma. They are afraid of losing their physical attraction, their strength and their potency. Cataracts or glaucoma, difficulties of hearing, may frighten them. Many consider the negative factors of old age only and don't see the positive ones. The latter center around the elderly person's greater understanding of life, his patience, experience and wisdom. These positive features of old age permit successful emotional rehabilitation. For this purpose, the image of the aging has to be changed among the aged persons themselves. Braceland is one who emphasizes this.[12] Karl Menninger places hope, in the aging, as an important dynamic factor for successful adjustment.[13]

3. In almost all aged persons there is fear of dying. This fear, at times conscious but, frequently, unconscious, causes much restlessness, insomnia and, sometimes, disturbed behavior of the elderly persons. This has been discussed by Meerloo,[14] Wolff[15] and others. For this reason, the elderly are frequently afraid of the dark, like to keep the light on all night, want the attention of physicians and nurses and demand not to be left alone. We should recognize, on the other hand, that many geriatric patients, even when they know they may die soon, remain hopeful and serene. Seldom do they show concern or fear. We should study the reasons and dynamics for this optimism.

Having observed many geriatric patients, I should like to emphasize the importance of the fear of death in the elderly. I consider it as the most characteristic and durable symptom of the geriatric patient. While patients in the younger age group know this kind of fear, they typically experience it only temporarily when they are seriously sick and under great stress. In contrast to the geriatric patient, they lose fear when health is regained or the stress is reduced.

4. Finally, very characteristic for the geriatric patient are his feelings in regard to his goal in life. Many elderly people have lost their goal and purpose in life. If the person's profession or occupation represented such a goal, forced retirement is felt as a tremendous blow. When artistic or scientific goals can not be fulfilled because of physical sickness (cerebral arteriosclerosis with memory impairment or confusion or both) the elderly person is particularly prone to breakdown medically and emotionally. When the goal in life has been marriage and a happy family life in the closeness of dear ones, death or absence of these important persons (parents, marriage partners, children, friends) frequently leads to depression and agitation. The elderly person needs somebody to live for, something deeply to be interested in, something to permit him happiness and fulfillment. Life has to remain meaningful and purposeful. If the goal of life is lost, the aged individual becomes emotionally sick and is likely to suffer from physical complaints.

3 *Interaction*

Now, let us look at the interaction of the older person and the family.

Considering some of these liabilities of the older generation, it is understandable, why family conflicts between adult children and elderly parents are unavoidable. Misunderstandings, resentments and hostilities on both sides can be frequent. Because of the many physical sicknesses connected with aging, some oldsters request continuous treatment and care which might test the patience of the younger generation and, eventually, bring the family into economic distress.

Self-pity and hypochondriacal complaints of the elderly can become difficult to tolerate (Busse).[16] The retired and financially dependent parent often is felt a burdensome responsibility. A distorted image of aging and concern about dying and death might disturb younger members of the family. A hopeless outlook for the future and life in general, by the emotionally sick elderly person can cause hostility and depression in the insecure and ambitious young person. If these negative aspects of old age play a predominant role, the elderly person will be pushed aside by the younger generation, will become isolated, and will be considered an intolerable responsibility. We can thus see how the elderly parent can be institutionalized when he does not need it—and then forgotton by the younger generation after a certain length of time in the institution.

Under these circumstances, rationalization will be used to justify such action by the younger generations to make themselves feel less guilty. Lack of housing facilities is frequently given as an excuse. Occasionally, the tendency of some of the older people to get disengaged can be abused (Cumming).[17] The process of disengagement from society, according to my experience, is not as frequent or as egosyntonic in the elderly as stated in the literature. I found that it is often imposed upon the older generation by rejecting family members or by society and made to seem to be the real attitude of the elderly. Although elderly people need more time for rest and can't participate in many of the sportive, recreative and social activities of the younger generation, most elderly people feel ambivalent about their loneliness and reach out for contact with young people, especially of their own family.

juvenile delinquency

In this connection, I should like to say something about a paper by Linden. "Relationship between social attitudes toward aging and the delinquencies of youth."[18] Linden points out the link between our lack of respect toward the elderly person, our cultural attitudes of rejection and intolerance, our feelings of impatience, hostility and annoyance with the elderly parents or grandparents on one hand and the increase of juvenile delinquence on the other. Children who cannot identify with father or grandfather, who consider elderly parents useless and burdensome, who laugh about senior citizens, who grow up without parent support, and without ethical judgment, are basically in a state of rebellion. They live in an atmosphere of freedom without limitation or responsibility, of wanting—without satiation levels, and of intense egocentricity and narcissism. Children who do not learn to look upon the elderly as worthy of respect are basically rebellious against authority. Police control can never substitute for parental control. Punitive measures will never be as effective as the child's experience of love and understanding.

Affection by the parent toward the child with simultaneous hatred to the grandparent can only lead to ambivalence, confusion and rebellion by the child against the parents themselves and the culture which the parents symbolize. *Our family structure and dynamics are, in large measure, to blame for the increasing delinquency of our children.* There is no such thing as fragmented love. Children are aware of the rejection and hostility that underlie the rationalization processes by which the elderly grandparent is pushed from the home, or isolated within the home itself.

attitude toward elders

Dunham points out that a cultural factor is involved in our attitude toward elderly persons.[19] For instance, in China—where the utilitarian, individualistic dynamics of the Western society are less prominent, where the cultural and institutional forms of ancient China are still preserved, at least partially, and where ancestor worship and the philosophy of Confucius are still taken into consideration—the male grandparents are without doubt treated as heads of the families and worthy figures of respect, authority, and even veneration.

A good relationship between parents and children, and cooperation and understanding between the generations, represented one of the most important features of pre-World War II Chinese religion, politics, welfare and economy. Security for older parents was always provided, and the interests of the younger generations played a secondary role. The children cultivated the land for the parents, when the parents were unable to do so. To have a son was the best insurance against the handicaps of old age. Public charity, therefore, was hardly known in China and would have been considered shameful for old people.

The same patriarchal attitude is characteristic of many Oriental peoples. In India, as well as in Israel, the same philosophies and attitudes are presently preponderant. In the China of pre-World War II rarely did elderly persons feel rejected and dejected, as in our modern European or American civilization. They were, on the contrary, happy, serene, and showed friendly benevolence and physical charm. They rarely suffered from resentment, bitterness and depression, so often seen in the faces of the oldster in the United States. As for my nine and one-half years experience as a physician in China from 1939 until 1948, I observed few psychotic reactions in patients suffering from chronic brain syndrome associated with cerebral arteriosclerosis or with senility. When the hour of death came near, death was greeted with serenity, and accepted as preparation for a better life afterwards.

healthier goals

I should like to close with the plea that we study and make use of the assets and capacities of older people to a much greater extent. Even as professional people we are too prone to start with the assumption that the aged client has little or nothing to offer to the family unit and that somehow he is the precipitating (if not basic) cause of family difficulty. I have found that he generally contributes his proportionate share to solution of family problems. The elderly person, as I have frequently stated in my publications, has many important things to give to the younger generation and to humanity. These include experience, wisdom, objectivity and a serenity which can help redirect the energies of the young and middle aged family members to more satisfying and emotionally healthier values and goals. ■

Veterans Administration Hospital (19320)

abstracto

Una familia usualmente incluye individuos de tres generaciones y está sujecta a conflictos que crecen desde las diferentes necesitades de los tres. El paciente geriátrico puede tener deficiencias debido a atrofia de los tejidos, déficit al cual Selye llama energía de adaptación, o falla a aceptar la ancianadad como un proceso natural. Interacciones causantes de disturbios dentro de la familia son inevitables. Desecho o aislamiento del anciano conduce a ambivalencia y, ocasionalmente a depresión. Crecimiento de la delincuencia juvenil ha sido atribuida a escasez de respeto para los ancianos y falla a utilizar las contribucinones que ellos pueden hacer. Nosotros estudiaríamos y haríamos uso de los consejos y capacidades de las personas ancianas. Ellos pueden contribuir con experiencia, juicio, abjetividad y serenidad, toda de importancia para proveer mayor satisfacción en la vida de familia.

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Impact of Scientific and Technological Advances

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Machines, methods, and mathematics have been introduced into hospitals in bewildering array. No department can escape the impact of automation, electronics, and new techniques. Physicians, at first reluctant to embrace this revolution, accept the changes after becoming acquainted with benefits. The future holds promise of more and better medical care for more people through technologic advance.

A more egregiously poor choice than myself could hardly have been made to give you this talk. I have always had an inherent distrust of machines and gadgets. I fly into a towering rage whenever an inanimate canned voice comes back to me over the telephone saying "the number you were calling is no longer in service." One of my greatest moments of joy occurred shortly after we had installed new automatic electric beds in our hospital. One of them with its precious human burden was ostentatiously raising itself upward when suddenly it neatly sheared the built-in oxygen outlet from the wall. I hoped the chaos that ensued would result in a return to the good, old-fashioned, hospital bed of yore, but alas, this did not prove to be the case. This was just the beginning.

brave new world

Many of the wondrous new machines with which we are filling our hospitals defy comprehension by the ordinary mind. Adding to their mystery is the care which has been taken to reveal very little of their modus operandi to the human eye. All of their more intimate and arcane parts are concealed within vault-like metallic walls and containers.

A dial, a flashing light, a typed sheet of paper, give us the information we are supposed to get and ours not to wonder how or why. Only in the laboratory are we given a glimpse of what is actually going on. Here labors the autoanalyzer, quietly performing eight simultaneous chemical analyses on tiny samples of serum, doing in eight hours the work it would take a technician two months to carry out. And there, exposed for all to see, go the little individual samples, moving inexorably through the strands of transparent tubing, each specimen separated from the next by its little bubble. This is a sight to behold, but alas, only too reminiscent of the production line for hatching and conditioning human embryos in Aldous Huxley's "Brave New World." However, it is not for me to consider what kind of a civilization we may be creating, but rather to discuss some of the recent scientific and technological advances affecting patient care and their impact upon hospitals.

It has often been said that doctors and hospitals have been far behind industry in taking advantage of modern technology, computers and automation. This is no doubt true. Doctors have not been familiar with these things. Medical students have not been taught about them. There has been a lack of communication between the medical profession and mathematicians, engineers, computer experts and scientists in other fields. Financial considerations have exercised a restraining effect. Of late, intensive efforts have been made to correct the deficiency which exists. National conferences on biomedical instrumentation have been held. Early in May, the American Medical Association committee on medical facilities sponsored a conference on computers in an attempt to maintain liaison with other disciplines and to educate physicians on the potentialities of electronic data processing. Medical school curricula will no doubt be altered to include instruction in this field.

in the operating rooms

Perhaps we have lagged behind, but consider for a moment some of the new equipment which has been brought into our hospitals with-

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in the last five to ten years. I live in a community of 180,000 people. We have four general hospitals. These are probably fairly representative of many others in communities of this size not associated with a medical school. In the operating room we have cardiac monitoring devices and cardiac resuscitators. With ever more extensive surgical procedures being performed, and as an increasing number of our patients are aged and debilitated, such devices as these are essential. There are two heart pumps and oxygenators for establishing extra-corporeal circulation, used chiefly for open heart surgery, occasionally for perfusion of cancericidal drugs. There are operating microscopes, originally procured for the otolaryngologists to carry out their operations on the middle ear for the relief of deafness, more recently also being utilized by the vascular surgeons. There was talk about obtaining a laser device with which the opthalmologists could treat detached retinas, but a photo-coagulator was obtained instead. We look forward to the day when we shall have closed circuit TV for communication with the surgical-pathology laboratory, for teaching purposes, and even for reading some of the monitoring devices.

recovery rooms and intensive care rooms

In the postanesthesia recovery room there are devices for continuous monitoring of the electrocardiogram, pulse, blood pressure, along with more of the cardiac resuscitating devices. All of the patients aren't monitored but the equipment is used for those who are seriously ill. The same type of equipment is available in the intensive care unit. Some day we shall probably also utilize devices which monitor body temperature and oxygen concentration of the blood as well.

Our most recent addition is the coronary care unit which offers a new approach to saving lives of patients with myocardial infarction. It is well known that the highest mortality in this condition occurs in the first 24 hours with 50 per cent of the deaths occuring in 72 hours, 75 per cent in five days. The most common causes of death are arrhythmia and cardiac arrest. Death from these causes can be prevented if they are promptly detected and defibrillating and pacemaking electrodes judiciously employed. Institutions that have had more experience than ours, have reported reducing the 72-hour mortality rate from 26.3 per cent to 12.5 per cent. The value of some of the new equipment is difficult to document statistically, but here is a prime example of salvage by skilled nurses, aided by electronic devices which extend their powers of observation of the patients' physiologic parameters. The nurses who work in this department receive in-service training, gradually overcome their initial apprehensions, and become adept and enthusiastic. They are able to interpret intelligently the changes they observe on the monitoring devices, to evaluate their significance, and gradually develop the judgement necessary to decide upon appropriate action. The service they provide combines an advanced knowledge of electronics in patient care with all the advantages of personalized bedside nursing. Other equipment in these departments includes positive pressure respirators; so far we haven't gone in for external cardiac massage machines but have depended on trained hands and strong backs. The respirators have also proven to be of great value in the hands of our inhalation therapy service. Their Bennett valve machines which are taken directly to the patient's bedside have been a great boon, not only to our postoperative patients, but also to patients with nonsurgical pulmonary problems. Among postoperative cases, atelectasis and pneumonia are seldom seen.

laboratories

Our laboratories were the first departments to go in for automation with their cell counters, dilutors, autoanalyzers, fluorimeters, etc. I am told that autoanalytic methods have been perfected for over 90 per cent of routine blood chemistry determinations. These machines combine speed, accuracy, simplicity and afford possibilities for mass screening as well as routine determinations. Once they are paid for ($12,000 and up) the cost of running tests is trifling compared to conventional methods (25c vs. $5 to $10). Results can be printed automatically by connecting up with a digital read-out device.

We have had no need for an automated blood typing system since all of this work is done at the community blood bank, but it is interesting to note that such a machine can type 700 pints of blood in an eight-hour day, determining standard and rare blood types, and Rh sensitivity. In the isotope department there are Geiger counters for measuring uptake of various radioactive substances, scanners for outlining various organs and delineating the lesions which they may contain. I understand it is now possible to greatly sharpen these images by recording the scan on magnetic tape and processing it through a computer. Happily, we have so far been spared the expense of such research equipment as electron microscopes, x-ray or atomic absorption spectrophotometers.

x-ray departments

The x-ray department has always required expensive equipment. Recently, in response to the demands of the cardiologists and the vascular surgeons, rapid serial film changers have been acquired for cardiography and angiography. Cineradiography and image intensifiers are with us now. Television viewing and video tape recording is probably not too far away. Film development has been automated and becomes progressively more rapid. I was delighted recently to read of a device which possibly some day will eliminate the need for some of the gastrointestinal studies which the radiologists carry out, namely, a miniaturized TV camera which the patient swallows and which can be used for study of the GI tract. Some of the newer therapeutic radiologic tools include various types of supervoltage units, and radioactive cobalt, by which it is possible to deliver high voltage radiation to increasingly circumscribed areas with less cutaneous and systemic reaction. Plans had been made to provide facilities for the administration of radiation in a hyperbaric environment. These have been abandoned since enthusiasm for this therapeutic modality seems to have waned. Both the laboratory and the x-ray department will be subjected to even greater demands than the rest of the hospital after the advent of Medicare because of the necessity of providing the out-patient diagnostic services afforded by Part A of Title XVIII.

New physiologic laboratories have made their appearance in our hospitals. There is an electroencephalographic unit, a pulmonary function unit, and a cardiac station. Recent acquisitions of the latter include a phonocardiograph and an apparatus for carrying out radio-electrocardiography. It is interesting that telemetry, which has reached such a high degree of refinement for the study of our astronauts in space, has proven of value for the performance of stress electrocardiograms. You are probably all familiar with the work of Oregon's track coach, Mr. Bowerman, who has had his medical colleagues monitor the middle-aged businessmen whom he has been conditioning with his "jogging" program. This type of monitoring has also led to the development of an instrumented chair which will soon be on the market which monitors patients' vital functions without encumbering wires. It resembles an ordinary swivel seat arm chair, but a built-in sensory system records pulse rate, respirations, heart sounds, and a complete electrocardiogram in a matter of 20 seconds.

emergency equipment

In the emergency room and available to the floors is a cardiac resuscitation cart complete with monitoring equipment, defibrillators, pacemakers, etc. A trained cardiac resuscitation team responds to the call of "Code 55" and rushes to the site of any cardiac catastrophe occurring in the hospital. At our last staff meeting, Dr. Merendino, Professor of Surgery at the University of Washington, told us of the pulmonary embolism team set up at the University Hospital. The team treats patients with this condition for shock, carries out a lung scan, pulmonary angiography, and if necessary, embolectomy.

One of our best known pieces of apparatus is our artificial kidney. Hemodialysis has been highly developed in the Northwest under the aegis of Belding Scribner. Chronic uremic patients are kept alive and self-supporting, even though both kidneys are non-functioning or have been removed. The appalling cost of hospital dialysis, which ranges between $12,000 and $14,000 a year, is being greatly reduced by the development of home dialysis in which our Spokane group has pioneered. Mortality from acute renal failure, whether due to prerenal causes, acute structural damage or poisoning, has been reduced from 60 per cent to 26 per cent. Care which formerly was purely palliative, is now curative. The machine alone doesn't save lives. A high degree of supervision, careful observation and alertness for possible complications are needed. Initially this is carried out by physicians, then by nurses and technicians, and ultimately, in chronic cases, by the patient and his family.

In a nonteaching community we are at least spared the expense of some of the fantastically high-priced equipment such as large hyperbaric chambers with built-in operating rooms, human centrifuges, linear accelerators, betatrons, and increasingly sophistocated electronic apparatus.

available everywhere

It should be apparent from what has gone before, however, that the electronic revolution has reached the hinterlands; the new technology is now action in the community hospitals as well as in the great teaching centers. The really significant change, comparable to the industrial revolution of the 18th and 19th centuries, is now taking place as more and more hospitals are adopting automatic data processing and learning what computers can do for them. Originally used in the business and administrative offices of hospitals, computers are now being employed more extensively as programs are being written for an increasing variety of hospital operations. Since they soon will be upon all of us, we might do well to heed the admonition of the scientist who coined the word *automation*, John Diebold, who said, "Instead of wondering whether the machines will replace us, we must, in response to the challenge, learn how to use the machines. We must learn how to adapt to the whole new way of life they will inevitably bring."

The principle thing which computers do for hospitals is to improve the flow of communications. This is said to result in better service, fewer personnel, and decreased costs. However, Professor Robert S. Ledley, of George Washington University, has said, "The use of computers does not necessarily cut costs. Their prime advantage is that they can make possible advances in medical research and application that would otherwise have been impossible. It is certain that computers will bring better and more uniform medical care to more people."

What are some of the more specific applications in the various departments of the hospital? Since automatic data processing started in the business office, we might consider this first. It takes care of such matters as gathering financial and statistical data, billing, cost accounting, budgeting, payroll, insurance prorating, auditing, accounts receivable, and may even function as a time clock. In the record room it assures legible, accurate records of high quality and consistency. The history of a given patient or a group of patients is readily available. Several thousand cases can be reviewed in a few minutes.

Large scale clinical research is speedily accomplished and quality controls easily determined. Information regarding hospital stay, infection rate, the effect of drugs, surgical procedures, pathologic findings, is promptly accessible to review committees. The computer can't think, but it can perform tasks without error or fatigue in seconds, which would require practically a lifetime of effort with pencil and paper. In the admitting office, basic data yield census reports, information desk reports, departmental requisitions, dietary requirements, and nursing station notification of room and bed assignment.

In the laboratory, rush and routine test requisitions, usage statistics, verifications of specimens received, completed test entries and patient charges can be filed in the memory system for subsequent retrieval. Autoanalyzers can be connected to print out reports directly on the wards. In the x-ray department the computer takes care of requisitions, scheduling of routine procedures and those requiring special preparation. Procedural information regarding the latter will be printed out at the nurses station, usage statistics, film inventory, completed test entries, reports, charges, enter the system for subsequent retrieval.

In the offing is computer analysis of radiographs, with compensation for the physiologic, psychologic and visual limitations of the radiologist. Roentgen photographs can be quantized by a film reader which scans, digitizes and stores the information on magnetic tape. Various types of enhancement programs can be introduced to the computer for the desired processing parameter. The image is processed, displayed on a cathode tube, and photographed on polaroid film for study. Computers can help correlate special reports with clinical and laboratory data.

In the operating room, scheduling, surgical nurse staffing, validation of pre and post-operative medications, length of time of procedures, usage statistics, inventory control, transfers to recovery room, equipment requirements in each case, special care techniques, patient charges, can be handled. In the pharmacy, the use of a formulary which is constantly kept up to date is greatly facilitated.

electrocardiographic analysis

A recent development applicable to the cardiac station is electrocardiographic analysis by computer. Leads from the patient record on a magnetic tape, which is run through an electronic digital converter. This data may be fed directly into a computer or sent to one by telephone or telegraph wire. Here it is put back on tape, processed by the computer and reported by print-out or a voice over the telephone giving the differential electrocardiographic diagnoses listed in order of probability and their possible clinical significance. Time lapse is 10 minutes from time of recording to report, which may be delivered to any point accessible by telephone with an accuracy of 90 to 95 per cent. In a large center, or as a consulting service, the expense of such equipment may be justified and would eliminate the tedium from routine interpretation.

In the dietary department, diet orders, verification of feedings, fasting orders, menu preparation to allow for seasonal price variation, personnel schedules, food inventory control, selective and special diets, guest tray requisitions, are handled. One reads about radar ranges in hospital kitchens and electronic cooking of the patients' meals from their own freezers.

nursing stations

One of the most interesting applications of the new equipment is at the nursing stations. Pioneering in this work has been the Children's Hospital in Akron, Ohio. Here there are manual entry and output units at the nursing stations which provide interpretation of physicians' orders, hourly medication schedules, standing orders at the start of each shift, specimen collection schedules, stat order handling, narcotic inventory control, capability of requisitioning from all other departments. Queries are made on unfilled orders, vital sign indications and patient profiles are recorded, nursing procedures are described, floor stock inventory is carried out as is time recording for nurse staffing and scheduling.

The physician can challenge the system at any time for a report on a patient. If he orders a drug, the nurse punches a code key; there is no transcription on cardex, no medication card, no pharmacy requisition to fill out. The machine prints back the order for accuracy; if the nurse makes an error the machine indicates this. If the order is correct, the nurse pushes the transmit button, the order goes to the pharmacy and is stored in the computer memory system. Forty-five minutes before the drug is due, the medication schedule is printed out. After the medication is given, the nurse indicates this on the input unit. If she doesn't, the order is reprinted at intervals. A reasonability check regarding the appropriateness of the medication and dosage is written into the program as is allergy flagging.

At the end of each nursing shift, an audit is printed out giving the reaction of the patient to treatment, a nursing care plan summary, nursing notes, procedures, temperature sheets. A daily summary for the physician is available on the patient's chart. If the physician orders an x-ray requiring catheterization, enema, and "hold breakfast," central supply is notified regarding the enema and catheterization, the dietary department is told to hold breakfast, and scheduling in x-ray is carried out in a manner designed to avoid conflict and priority problems. After the x-ray is taken, the film inventory is adjusted, the dietary department told to feed the patient, and charges made.

out-patient department

Computers have also been adapted for use by the out-patient department. The Permanente Medical Group in Oakland carries out routine periodic health examinations using an automated, multi-test laboratory with a capacity for handling 4,000 patients a month. The patient moves through a modified assembly line which subjects him to an electrocardiogram, anthropometry studies, recording of pulse and blood pressure, chest and breast x-ray, visual acuity test, tonometry, retinal photography, audiometry, vital capacity determination, health questionnaire, eight blood chemistry tests, blood count, VDRL, blood group, latex fixation, glucose tolerance test, urinalysis.

Additional studies are done at the advice of the computer. One patient is processed every three minutes. A summary report goes to the physician who then completes the examination. The increased efficiency which results from close integration of many tests provides a large amount of information for the physician at a reasonable cost. It provides a comprehensive profile of the patient's physiologic status and makes possible early detection of a wide range of unsuspected disease. Actually, such methods may open up a new era in preventive medicine and epidemiologic research.

psychologic testing

At the Mayo Clinic, totally automated psycologic testing has been carried out using the Minnesota multiphasic personality inventory. The patient fills out cards that go directly into the computer. A summary personality description emerges for the physician. It is not unlike putting your penny in a weighing machine and getting back a card which tells your fortune. Other out-patient clinics have found that automation provides them with readily available, legible, accurate records which automatically indicate any discrepancies. The cost may run as high as $2.00 per patient visit and there does not seem to be much saving of time for the physician. The New York bloodbank uses a computer to study its inventory, needs and other activities.

Computers represent powerful tools for research. There is a three and a half million dollar computing facility at the UCLA Center for Health Sciences. Huge masses of medical and biologic data are being analyzed, complex biochemical experiments are facilitated, and support rendered for basic medical research. Medical libraries are being computerized at a number of universities. As reliable and retrievable clinical data collection becomes possible, nationwide sharing of information among many physicians and health agencies will be feasible.

As an aid to the practicing physician computers can calculate and analyze all manner of data ranging from pulmonary function studies to laboratory tests. They can calculate fluid and electrolyte needs. They may even offer assistance in medical diagnosis. Feinstein, of Yale, has pointed out that the physician thinks in mathematical sets and with symbolic logic. Diagnosis, prognosis, and treatment are experiences in inductive and deductive logic which can be described in mathematical symbols and diagrams.

Modern abstract mathematics may be a useful tool for studying human disease. Computers, because of their storage and correlative facilities, may expedite diagnosis, prognosis and treatment. What they do, of course, is to calculate the probability that a patient with a group of symptoms has a particular disease. There greatest value is in furnishing the physician with comprehensive information, functioning as a teaching, rather than diagnostic, machine.

One great weakness in the adaptation of computers to diagnosis is that the seasoned clinician often relies on inexact data, experience and intuition in making a diagnosis, while the computer needs facts. A whole new language has developed around computers. The U.S. Government printing office has published a glossary of automatic data processing terms. The AMA publication on current medical terminology is coded for computers.

All of these things sound almost too wonderful to be true. One feels there must be a hitch somewhere. It is true that electronics and automatic data processing bring with them certain problems. In considering some of these problems we can perhaps best do so while noting the effect of these new developments on patients, doctors and nurses and hospitals. The public today is solvent and well insured. It is hospital oriented. It is well-informed. The patient regards medical care as his right and expects the best. He wants the benefits of the latest scientific investigations and the most modern equipment, yet he objects to what this does to the cost of hospitalization. He still wants personalized tender loving care, in spite of all the machines. He fails to realize that to some extent he may be at the mercy of these machines. They are too expensive to duplicate like power plants and it would be difficult for him to forgive a mechanical failure if it jeojardized his survival. The more complex the computer system or electronic device becomes, the greater the likelihood of equipment failure.

physician resistance

The doctor tends to resent things he finds hard to understand. He regards many of the new innovations in the same light as the gadgets exhibited in a "House of the Future" at a World's Fair. They are fascinating to contemplate, but how many people can afford them and really need them in their own home? Should every dwelling have a radar range, a 3-D color communications system and hot and cold running champagne? Certainly some of the new hospital equipment is truly life-saving, but how many patients actually need it?

In general, however, after initial resistance, once the values and limitations of automatic data processing are understood, acceptance by the doctor seems to be good. It doesn't of necessity make a ghost physician of him, seeing patients through machines, sitting in a secluded area receiving reports by monitor, tape and closed circuit TV. It won't replace him; rather it provides an extension of his intellect and becomes a valuable aid to decision making, freeing him from many trivial tasks.

Unfortunately, computer technology is changing so rapidly it is difficult for even the most enthusiastic physician to keep up. In some areas, both the attending and house staff have begrudged the time required to transcribe data, finding it a nuisance which takes time from patient care. This has been particularly true on patients with whom they are familiar, where the bother of filling out special forms hardly seems worth the time it takes. Physicians share with other personnel the feeling of "psychologic distance"; although communications are vastly improved, there is less face to face confrontation. A great deal of education is required to attain complete acceptance by the people who work in the hospital and cooperation between the staff and the electronics specialists is essential.

redefining nurse functions

Data processing equipment is a force which will impel redefinition of the nursing role. Nurses have traditionally spent up to 40 per cent of their time performing clerical and managerial tasks that hence-forth can be done more efficiently by machines which minimize the opportunity for inaccurate transcription and transmission of information. According to Rozella Schlotfeldt, Dean of the School of Nursing, Western Reserve University, nurses are responding to this incentive by redefining their functions and will again be able to give more of their time to patients. I think some nurses are concerned that if the machine gives them more time, the administrator will fire them. Some hospitals have adopted a unit manager plan, completely relieving the nurse of messenger, transport, clerical and coordinating duties. Interestingly enough, some nurses have been quite reluctant to relinquish these traditional functions.

Eleanor Lambertson, Chairman of the Department of Nursing Education, Columbia University Teaching College, in an article entitled "Nurses Have Been Trained to Nurse People, not Machines," says "The central question is whether direct care of the patient is to be the major responsibility of the registered nurse, or whether technological change and those who design new techniques and new devices are going to change the nurse, her role and her responsibility." In response to the demand for technicians capable of supervising and caring for an increasing variety of technical devices why is the nurse singled out as the person responsible? Should her curriculum be changed to make her an electronics expert? These are hard questions to answer.

problems

The effect of computers on total hospital operation is sometimes difficult to evaluate. The problems of transition to the new system are great. Careful plannning is required in installing an automatic data processing system. Much education of hospital personnel is required. There is a great demand for people with special training who are already short in supply.

The hospital becomes more vulnerable than ever to electrical power failure. Fantastically expensive equipment sits idle much of the time. Programming is complex and must be individualized to the needs of the hospital. Debugging is difficult. Even automation of medical records is not simple. Information has to be coded, stored and decoded. Errors of input are a major source of difficulty, even though provisions can be written into the program to delete or correct data in which errors of transcription or recording are made.

An interesting acronym GIGO, has been coined in connection with training hospital personnel in these functions. It stands for "garbage in, garbage out." Flexibility within the hospital is both increased and decreased; there is more information available but it is harder to make changes. Major problems seem to lie in mechanical shortcomings and machine inadequacies. Much verification of data is required. It is not yet universally agreed that automatic data processing is better than manual storage of pathological, laboratory and clinical records.

Then there is always the ghastly thought that someone might erase the magnetic tape on which all the hospital records are stored. Some hospitals already are keeping duplicate master tapes for safety. There is also the fascinating question of the legal status of all this data processing. It may outlast paper, but is a computer printed report a legal medical document? Who is responsible for errors and for uncontrolled dissemination of confidential data? Although the use of the computers presumably is limited to qualified personnel, the highly privileged communications contained in them are accessible to anyone.

costs

The biggest problem of all these wondrous advances and improvements is their staggering cost, particularly if one goes all the way and installs a comprehensive system for the whole hospital. Is there any way we can go on providing for ever better health care and still maintain costs within reasonable limits? Medicare will strengthen financial capabilities with respect to operating funds, but bookkeeping methods will have to be drastically altered. The Social Security Administration has already balked at the payment of an average patient per diem rate and also looks with disfavor at the traditional subsidization of some hospital operations by padding the bills of such departments as x-ray, laboratory and pharmacy. If an automated lab test costs 25 cents to perform, a $10 charge will not be accepted by the government even if this means a drastic increase in the room rate.

What can be done to keep costs down besides going all out for disposable equipment to avoid hiring a few teen-age dishwashers? One may rent computer facilities. A modest start with a small system may cost as little as $30 to $50 an hour, a larger one costs $180 an hour. Various methods of pooling resources are being tried. The Sisters of the Third Order of St. Francis have set up a 12 unit hospital system in Michigan, Illinois and Iowa in which a central computer handles their entire financial work load. In Peoria, 12 institutions are served by a central data processing facility. This is available to any participating hospital, regardless of size and provides higher caliber operations and a more sophisticated system than an individual hospital could afford, in addition to saving space as well as expense. This group finds the system has greatly reduced the need for professional people to carry out clerical and other trivial tasks.

Eight hospitals in the Minneapolis-St. Paul area have established a cooperative program to share computer facilities under the auspices of Blue Cross. Their ultimate goal is to develop a state-wide information network connecting all of Minnesota's 180 hospitals to a central computer complex that will provide a wide range of accounting, administrative and hospital management services. The estimated cost for a 300-bed hospital will be $2,200 a month, which includes the use of staff, communications, cost of equipment rental and incidentals. This would be far less expensive for a hospital than owning or renting its own computer. Other combinations range from a two hospital effort in Washington, D.C., which was estimated to result in a net saving of $25,000 a year, to dreams of a nationwide hospital information system which it is said will profoundly benefit patients, hospitals and the medical profession. A limited fore-runner of this type of activity has been the Professional Activity Study of the University of Michigan which has been servicing many hospitals for a number of years. Since modern computer facilities serve everyone, not just the finance and record departments, some hospitals have felt that the responsibility for their operation should be assigned to a new and independent staff position.

satellite hospitals

Another approach has been the satellite hospital arrangement based on the concept that health care is predominantly a local responsibility and that with the help of a large, parent, general hospital, first-rate care can be delivered to small adjacent communities. Financial and administrative functions are centralized, such as accounting, purchasing, public relations, legal advice, new employee orientation, construction programming, payroll, management, laundry and stores. Professional services which are less frequently used such as complex laboratory and bacteriology procedures, x-ray therapy, electroencephalography, lend themselves well to centralization. The educational system may be centralized. Under this arrangement it is easier to attract qualified physicians to small hospitals because of the facilities available and the opportunities for education, research and good patient care. It helps keep the rural physician in touch. The prestige of the small hospital is enhanced because of the backing of a large general hospital with a respected reputation. Because of the large volume it may be possible to gear facilities to degree of illness and to group certain classes of patients for more effective care. Retired nurses are attracted back to work because of the availability of a good job near home with an opportunity for advancement. It is easy to shift key personnel without disrupting their lives and offers increased opportunities for promotion and less dead end positions. Indirect costs are spread over a broader base and substantial financial savings ensue. Problems have included an occasional breakdown of communications, and transmission of records has not yet been satisfactorily solved. There is less face to face confrontation, so there has to be more formal delegation of responsibility. Occasionally the staff of the satellite hospital will develop an inferiority complex and feelings of jealousy and resentment.

planning

It would certainly appear that there is a definite trend toward fewer autonomous individual hospitals. Centralization appears to be a much easier way to control unnecessary construction and duplication of expensive facilities than regional planning with its appeals to independent hospitals. Community health facilities planning as an alternative to the specter of government control has proliferated rapidly in the past few years. Eminently successful in some area, such as King County, it has had difficulty in being effective and even in getting under way in other communities such as my own. Part of the difficulty of convincing the civic leaders in our area of the value of health facilities planning, seems to be due to their feelings that we are entering a new era of cooperation between hospitals whereby they will voluntarily, through their own hospital councils, control and coordinate their activities. If unnecessary construction could be held down, duplication of expensive equipment avoided, and training facilities established for the sophisticated manpower which the new technology requires, and all of this done by the hospitals themselves, there would be no need for outside interference.

One cannot leave the subject of cost without speaking of the physical structure of our hospitals. There is no question that many plants are obsolete and outmoded. In this regard they are expensive to operate and maintain and extravagant in the use of personnel time. The current trend toward circular, high-rise construction would appear to save a good deal of walking and carrying. Hopefully, our "economy of abundance" will make it possible gradually to modernize all of our hospitals.

Bonnet, in his Presidential address to the House of Delegates of the American Hospital Association last year, made some interesting observations on the economics of hospitals. He pointed out that people either take hospitals for granted or regard them as a necessity to be provided by others. He then commented that in this economy of abundance of which we speak, investment in health services is not parasitic on the productive elements of the economy, rather it plays a significant part in maintaining the vigorous and expanding economy. "It may be that we should be increasing our investments and expenditures for health . . . Perhaps we should be devoting more effort to finding new methods and arrangements for financing health services . . . (and)applying less effort to cost reduction and dollar stretching. Improvements in health and reduction of sickness and disability can be among the most significant contributions to increasing productivity and continuing prosperity . . . The hospital is essential and though expensive, is economically productive." This is an interesting viewpoint and surprisingly plausible. The hospital payroll is Spokane's third largest.

limits

In our preoccupation with techniques and gadgets, we should not lose sight of the fact that the payroll still constitutes 70 per cent of the hospital's operating cost. As Dr. Bonnet points out, "The nature of the work of providing individual service for each individual sick person imposes definite limits on how far we can go in mechanization, decentralization, and reduction of personnel hours." The greatest shortage remains in trained and highly motivated personnel, such as registered nurses, licensed practical nurses, aides, attendants, technicians for the new machines, and clerks for the expanded load of paper work imposed by increased reporting to outside agencies. There is no easy answer to this shortage. I don't believe the solution lies in such government programs as proposed under the Manpower Development and Training Act, the Vocational Education Act, and the Economic Opportunities Act. I would hope that the hospitals, with the help of the institutions of learning in their own communities, could solve this problem themselves.

Finally, in this era of gadgets, computers and monitors to monitor monitors, we would do well to remember that not everything that is new is, of necessity, an improvement. Each new mechanical investment should be carefully evaluated. New tools must be wisely and appropriately used. As Eleanor Lambertson put it, "The problem is to keep the benefits of automation in appropriate balance with the skills of professional workers. If we fail in this, we will have created more overwhelming problems than any equipment could ever solve." Freyman, of Worcester, Massachusetts, in an article entitled "Leadership in American Medicine" commented, "There is a regrettable tendency to measure modern medical progress in terms of betatrons and extracorporeal pumps. The importance of scientific and technical advances is obvious, but I believe that the real measure of progress in today's medicine is the continuous dissemination of doctors who can provide up to date medical care to a large proportion of the total population and not just to the people who by geographic accident, live near metropolitan centers." ■

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abstracto

Máquinas, métodos y matemáticas han sido introducidos en los hospitales de manera sorprendente. Ningun departamento escapa al impacto de la automatización, electronización y técnicas nuevas. Médicos que al principio rehusaron aceptar esta revolución aceptaron los cambios despues de familirizarse con los beneficios. El futuro es prometedor de mayor y mejor tratamiento médico para más gente por medio del advance tecnológico.

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Ophthalmodynamometry in Patients with Cerebrovascular Insufficiency

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Ophthalmodynamometry was done on 45 patients evaluated arteriographically for evidence of cerebrovascular disease. Many factors other than occlusive disease can influence ophthalmic artery pressures. Therefore, only gross asymmetry or marked and consistent depression of ophthalmic artery pressures are significant. Diastolic ophthalmic artery pressures below 10 units or differences of more than 10-15 units between the two eyes correlate well with the presence of occlusive disease in the carotid or proximal neck arteries or both. Ophthalmodynamometry can be useful in evaluating the patency of the carotid arteries after endarterectomy as well as preoperatively.

Measurement of the blood pressure in the ophthalmic artery has been utilized for over 50 years in evaluating the status of the anterior portion of cerebral circulation. In 45 patients, we found that differences in ophthalmic artery pressure between the two eyes correlated well with angiographic evidence of occlusive disease. This procedure appears to be more useful than carotid compression.

diastolic pressure used

Forty-five patients with histories and physical findings suggestive of cerebrovascular disease underwent ophthalmodynanometry and subsequent arteriography. In a few cases the procedure was repeated after endarterectomy. Eyes were prepared with proparacaine and 10 per cent phenylephrine drops. While one examiner stood behind the patient and held a Baillart ophthalmodynamometer against the eye, the other observed the fundus by direct ophthalmoscopy. Several readings were made, particularly when there was labile blood pressure, irregular pulse or bradycardia. Pressures were always recorded with the patients seated and sometimes in the supine position as well. The brachial artery pressures in both arms were recorded for seated and supine positions.

In agreement with Hollenhorst, we found the diastolic pressures adequate in most cases and did not feel the added risk of measuring systolic pressure was justified.[1]

In patients whose fundi were difficult to visualize because of lens opacity or restlessness, the amblyopic technique described by Antin and Karlan was used.[2] The systolic pressure endpoint with this method is loss of central vision. Toole interpreted the first indication of diminution of peripheral vision as the diastolic pressure but we found difficulty in determining this endpoint.[3]

When pressures were less than 50 units, a 10 unit difference or more was considered significant and when pressures were above 50, a 15 unit difference was required. Hollenhorst considers differences of 5 and 10 respectively as significant, but we found too many false positive responses using his standards.[1]

Our rather low normal values were attributed to the routine use of phenylephrine, which lowers intraocular pressure.

asymmetrical pressures significant

No consistent ratio between brachial and ophthalmic artery pressures could be determined, even in the absence of arteriographic evidence of occlusive disease in the brachiocephalic vessels. Asymmetrical brachial and

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TABLE 1

Patients with Asymmetrical Brachial and Ophthalmic Artery Pressures

Low Presures Same Side	Low Pressures Opposite Sides	Angiography
R		R subclavian 50% occluded
R		Generalized proximal occlusive disease
R		R internal carotid narrowed
R		R subclavian partial occlusion
R		Generalized proximal occlusive disease
R		R internal carotid 100% occluded
R		R subclavian narrow
L		Both common carotid arteries narrow at origin
	X	50% occlusive vertebrobasilar system
	X	Aneurysm R middle cerebral
R		R internal carotid 30% occluded

TABLE 2

Arteriographic Findings in 45 Patients

I Patients with Symmetrical Ophthalmic pressures above 10	17
Arteriography negative	12
Arteriography positive	5
Bilateral carotid artery disease	4
Unilateral carotid artery disease	1
II Patients with Symmetrical Ophthalmic Artery pressures below 10	3
Arteriography negative	0
Arteriography positive	3
Generalized arteriosclerosis of cerebral vessels	2
Bilateral complete occlusion carotid arteries	1
III Patients with significant difference between opthalmic artery pressures in the two eyes	25
Arteriography negative	1
Arteriography positive	24
Bilateral carotid disease	4
With vertebrobasilar disease	2
Without vertebrobasilar disease	2
Uniltateral carotid disease	14
With vertebrobasilar disease	3
(One of these had occlusive disease in the contralateral carotid artery.)	
Without vertebrobasilar disease	11
Primarily vertebrobasilar disease	2
Proximal vessel disease, bilateral or ipsilateral	2
Other abnormalities	2

ophthalmic artery pressures coincided in 9 of 11 instances. In about half of these 9 patients, significant occlusive disease of the proximal vessels on the appropriate side was demonstrated, (Table 1).

The arteriographic findings in the 25 patients with ophthalmic artery pressures which showed significant asymmetry are shown in Table 2. In 18 of these patients, ipsilateral (14) or bilateral (4) internal carotid artery occlusive disease was demonstrated. In one case the occlusive carotid lesion was, however, on the side opposite to the depressed ophthalmic artery pressure. In 2 the lesion was more proximal; 2 showed primarily vertebrobasilar disease. In 2 patients other abnormalities were found and in only 1 was the arteriogram normal.

Twenty patients had symmetrical ophthalmic arterial pressures in the seated position, (Table 2). The 3 patients who had bilateral pressures below 10 diastolic showed either generalized arteriosclerotic changes or severe carotid artery disease. Twelve patients who had symmetrical pressures above 10 had normal arteriograms, while only 5 had symmetrical pressures above 10 and still had significant arterial disease demonstrable arteriographically. All but one of these 5 had bilateral carotid artery disease. (Table 3).

Thus it can be seen that symmetrical ophthalmic artery pressures above 10 were rarely associated with unilateral carotid occlusive disease, and the one exception had the measurement taken more than 2 months after occlusion.

A history of amaurosis fugax was noted in 9 of the patients, all of whom had significant carotid artery disease.

TABLE 3

Normal Ophthalmodynamometry, Abnormal Arteriogram

Patient	Occlusive disease Shown on arteriography %	Interval since last attack
1	R internal carotid 25 L internal carotid 90 Vertebrals 20	5 weeks
2	L internal carotid 50	more than 2 months
3	R internal carotid 30 L internal carotid 50	several days
4	R internal carotid 80 L internal carotid 50	2 months
5	R internal carotid 50 L internal carotid 50	several days

discussion

Hollenhorst states that the normal retinal artery diastolic pressure should be 45 per cent and the systolic pressure 55 per cent of the respective brachial blood pressure.[1] Normal ranges of diastolic ophthalmic artery pressures are usually 25-40mm Hg and systolic pressures are 60-75mm Hg. Smith and Cogan give the normal ophthalmic brachial artery pressure ratios as 2:3 for diastolic and 3:4 for systolic.[4] We rarely obtained such high ratios. The difference was probably due to the effect of phenylephrine in lowering intraocular pressure.[5]

Factors which may increase retinal artery pressures include:

1. Systemic hypertension.
2. Increased cerebrospinal fliud pressure.
3. Occlusive disease of the basilar artery system.
4. Increased intraocular pressure.

Conditions known to decrease the retinal artery pressure are:

1. Systemic hypotension.
2. Occlusive disease anywhere in the carotid system proximal to the ophthalmic artery.
3. Decreased intraocular pressure.

Closely spaced consecutive measurements also lower intraocular pressure.

Local anatomical variations in the origin and course of the ophthalmic artery may also influence the retinal artery pressure.[6] Basilar artery disease may increase, rather than decrease, retinal artery pressure.[1] A few of our cases with predominantly vertebrobasilar disease did have surprisingly high ophthalmic artery pressures.

Because so many factors can influence cerebral arterial pressure as a whole and be reflected in ophthalmic artery pressures, we feel that difference between the two eyes is the only significant finding, unless diastolic readings fall below 10 bilaterally.

Swietliczko and others have described a method of combining ophthalmodynamometry with the carotid compression test.[7,8] They found that:

1. In normal idividuals, compression of the carotid artery produces ipsilateral lowering and contralateral elevation of the retinal artery pressures.
2. In occlusive disease of the carotid arteries,

> compression of the *patent* artery causes a bilateral fall in retinal artery pressures, but *no* change occurs with compression of the diseased carotid artery except in the situation where the ophthalmic artery is supplied by way of the ipsilateral external carotid circulation.

This combined procedure carries with it the hazards of carotid compression, but when done with EEG and EKG monitoring can add useful information in selected cases to help in planning vascular surgery.

Hollenhorst points out the importance of doing ophthalmodynamometry within one month of the occlusion of the carotid artery since differences in pressure between the arteries tend to equalize after this time.[2] This was apparently the case in at least 2 of our patients (Table 3).

Ophthalmodynamometry can be useful in evaluating the patency of an artery after surgery, particularly if the procedure is done preoperatively as well as postoperatively. If the ophthalmic artery pressure on the operated side rises after surgery and later reverts to its previous low level, thrombosis has probably occurred.

summary

1. There is a wide range of normal values for ophthalmic arterial pressure.

2. One-time measurements of ophthalmic arterial pressure are only significant if diastolic pressures in the two eyes differ greatly or if they are very low. When equal and above 10 units, significant arterial disease may still be present particularly if it is bilateral but is much less likely than when the pressures are asymmetrical or below 10.

3. Ophthalmodynamometry is most useful when used serially to evaluate changes in carotid artery patency both preoperatively and postoperatively. ■

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abstracto

Oftalmodinamometría fue hecha en 45 pacientes, los que fueron evaluados arteriograficamente para evidencia de enfermedad cerebrovascular. Muchos otros factores, que aquellos de enfermedad oclusiva, pueden ser de influencia en la presión de la arteria oftálmica. Desde allí, solamente gruesa asimetría o marcada y consistente depresión de las presiones de la arteria oftálmica son significantes. Presiones diastólicas de la arteria oftálmica bajo 10 unidades, o diferencia de más de 10-15 unidades entre los dos ojos tiene buena correlación con la presencia de enfermedad oclusiva en la carótida o en las arterias proximales al cuello. Oftalmodinamometría puede ser de uso en la evaluación de la permeabilidad de las aterias carotídas despues de la realización de endartectomías así tambien como preoperativamente.

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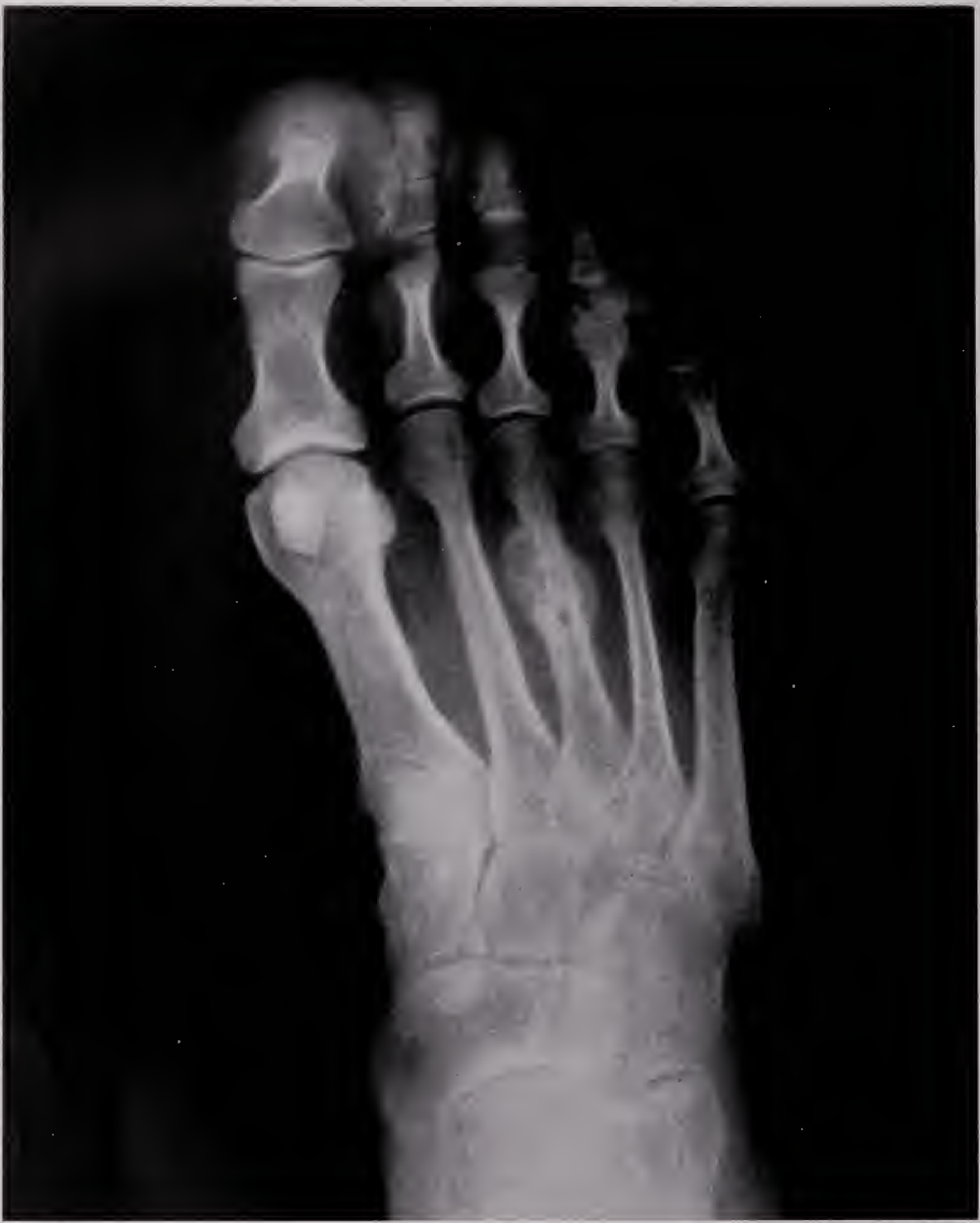
X-Ray of the Month



This 57-year-old white lady had been having pain in her foot for approximately one month. There was no history of trauma. A few days before the x-ray was taken she noticed a hard, mildly tender lump over the dorsum of her right foot. What is the diagnosis, cause, treatment?

see page 121

what time is it?

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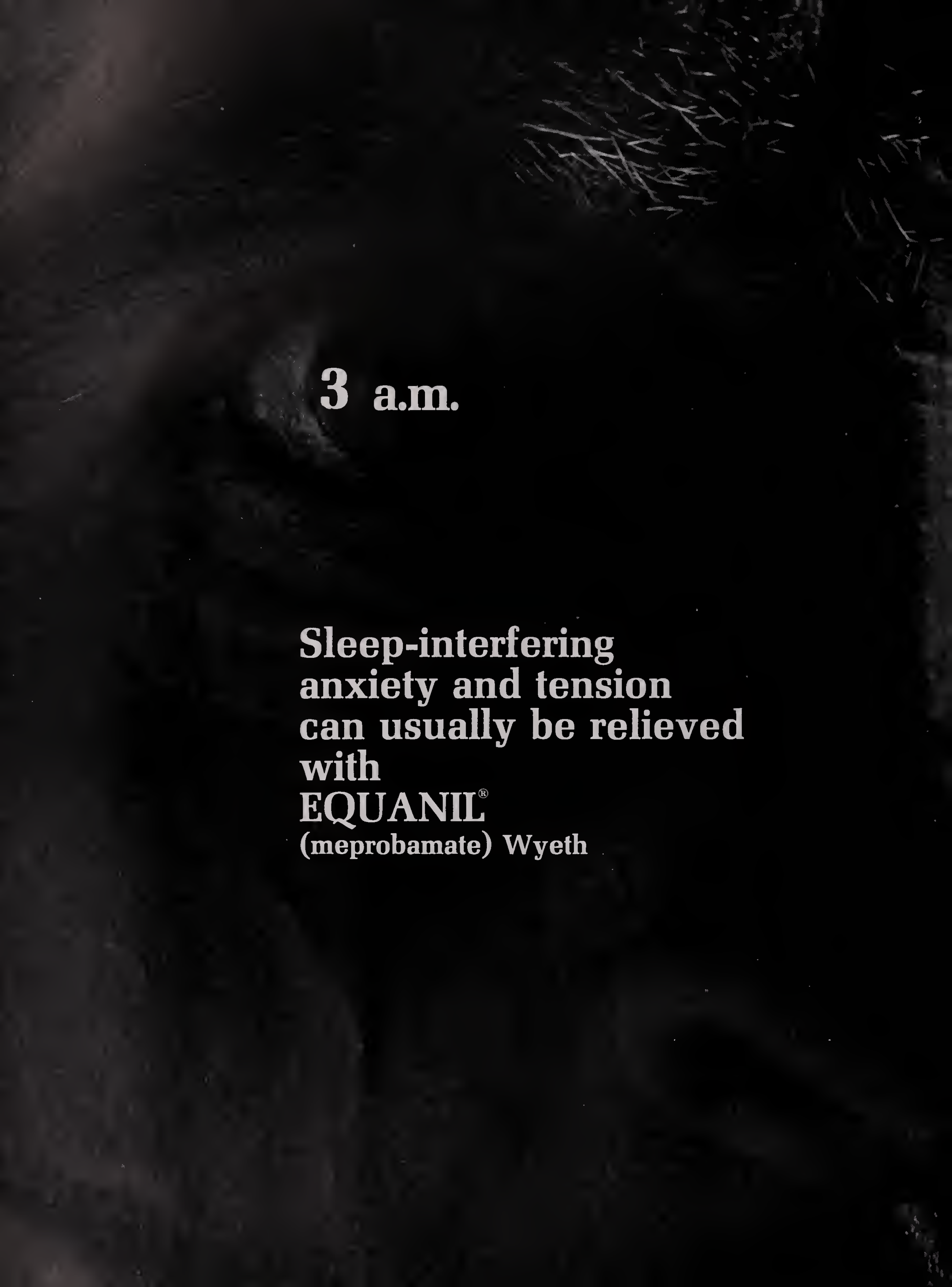
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Louis O. Machlan Jr. and Clinton S. McGill, both of Portland, are president and president-elect respectively of the Multnomah County Medical Society.

Other new officers are John W. Bussman, first vice-president; Jack E. Battalia, second vice-president; George M. Robins, secretary; and John W. Stephens, treasurer.

Course on Dermatologic Problems at UOMS

The University of Oregon School of Medicine has scheduled a post-graduate course on Diagnosis and Management of Common Dermatologic Problems, Feb. 17-18, in Portland.

The course, designed to bring a contemporary approach to commonly encountered dermatologic problems, will not attempt to examine the entire spectrum of dermatology. Diagnosis and treatment of five or six common skin problems will be examined in depth. Among them: acne, eczema, contact dermatitis, psoriasis, warts and common cutaneous tumors, and fungus infections.

Emphasis will be on diagnosis by office laboratory techniques and will be done for the most part in small informal groups, supplemented by faculty lectures and patient demonstrations.

Enrollment is limited and preregistration is required. The course is acceptable for 9 hours of AAGP Category I Credit.

Other post-graduate courses on the calendar:

New Horizons in Cancer—Jan. 20, 1967

Psychiatry, the Family and Medical Practice—Feb. 23-25, 1967

Chest Radiography—March 9-10, 1967

Review of General Surgery—March 9-10, 1967

Computers and Medicine—Is the Show Worth the Price of Admission—April 27-28, 1967

Commonly Encountered Infections in the Obstetric and Gynecological Patient—May 27, 1967

Genetics in Medical Practice—June 15-16, 1967

Jones Heads Biochemistry at UOMS

Richard T. Jones, a native Oregonian and alumnus of the University of Oregon Medical School, has been appointed chairman of the Biochemistry Department according to an announcement by D. W. E. Baird, Dean.

He was formerly professor of biochemistry and associate professor of experimental medicine. He succeeds Wilbert R. Todd, who has been serving as acting departmental chairman since the retirement of Dr. West earlier this year.

After completing his internship at the Hospital of the University of Pennsylvania in 1957, Dr. Jones took a four year fellowship in chemistry at the California Institute of Technology and was awarded his Ph.D. degree. He has been a member of the University of Oregon Medical School faculty since that time. Dr. Jones is nationally recognized for his research in proteins and amino acids and their relation to disease. He is currently collaborating in studies of several abnormal proteins resulting from genetic change. While at the California Institute of Technology he studied structure of human hemoglobin and chemical evolution of animal hemoglobins.

Oregon Physician Wins Free Trip

MYLON L. BUCK, M.D.

Mylon L. Buck, Eugene, Oregon, has won an expense-paid vacation for two in the Bahamas for the "best original article by a physician" in the 1966 *Medical Economics Awards* campaign.

Dr. and Mrs. Buck will fly from the West Coast to the island of Eleuthera, where they will be guests of the magazine for 10 days at the Rock Sound Club. Dr. Buck's winning article, scheduled for publication early in 1967, was his first try at writing for *Medical Economics*. The article explains how he made his practice more efficient in order to reduce his work week and spend more time with his family, while improving patient care and increasing his income.

Among several who received certificates of Awards for outstanding articles were Bernard P. Harpole, Portland; Daniel R. Kohli, Seattle, and George J. Schunk, Salem.

OBITUARIES

DR. MOSES E. STEINBERG, *Portland, died Aug. 11, 1966. He was 80. Dr. Steinberg was born in Russia and lived in Portland 45 years. He was a 1917 graduate of Rush Medical College, Chicago. Dr. Steinberg was a member of the International College of Surgeons and the American College of Gastroenterology. Cause of death was a malignant brain tumor.*

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MEDICAL STAFF
John R. Montague, M.D.
Merle M. Kurtz, M.D.
Marvin J. Weinstein, M.D.
Norris H. Perkins, M.D.
John W. Evans, M.D., Consulting Psychiatrist
Physicians

PRESIDENT'S page

JOHN E. TYSELL, M.D.

Policy Is Everyone's Business

With the increasing thrust and effectiveness of medical political action programs everywhere, there is an increasing need for a sharp look at the effectiveness of the democratic process in the shaping of medical policy. There is little point in increasing the influence of organized medicine if we are merely putting a sharp tool in the hands of a little group of willful men who do not truly reflect the feelings and philosophy of the vast majority of physicians. If it is true that people love and respect their personal physician but dislike and distrust "organized medicine," something needs fixing.

Because of this feeling all over the country and at all levels of medicine, physicians have created study groups, commissions, and committees to examine our system and suggest improvements. Our good neighbors in Washington have created a new and exciting program with this end in view and we wish them every success.

In Oregon a new Council on Medical Education has been created. It is financed by ear-marked dues and its purpose is not only to improve all types of on-going medical education but also to free the main organization for more effective policy implementation in the socio-economic areas.

Improved mechanisms for implementing policy demand improved mechanisms for making policy. Nearly all groups studying this problem, from the county societies to the A.M.A., have found that in existing organizational structures the mechanisms for excellent representative government exist. I have heard of no serious flaw uncovered and no new or exciting mechanism proposed.

The problem seems to lie in communication. Great volumes of printed and oral material flow out from the various headquarters. The efforts to communicate "from the top down" are tremendous, if not always effective. But communication must be a two-way street and messages "from the bottom up" are meager except when someone's "ox is gored."

Many doctors are escaping their responsibility to their patients by a policy of non-involvement. They say "my voice will not be heard," or "I am too busy, it is a waste of time."

The proper setting of policy is everyone's business in a democratic society. Let us not, by default, permit the democratic process to break down. Study the problems, form an opinion on them, and let it be heard. *Your ox is being gored.* ■

John E. Tysell M. D.

WASHINGTON

Washington State Medical Association—1800 Terry Avenue, Seattle, Washington 98101

PRESIDENT	*Lucius D. Hill, M.D., Seattle*
SECRETARY	*Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY	*Mr. R. F. Gorman, Seattle*

annual meeting, September 10-13, 1967, Seattle

LUCIUS DAVIS HILL, III, M.D.

President, Washington State Medical Association

place and date of birth

Knoxville, Tennessee, September 6, 1921

education and training

B.S. Degree—Virginia Military Institute, 1941.

M.D. Degree—University of Virginia School of Medicine, 1944.

Internships—University of Virginia Hospital (Medicine), 1944; Vanderbilt University Hospital (Pathology), 1948; Vanderbilt University Hospital (Surgery), 1949.

Assistant Resident in Surgery, University of Virginia Hospital, 1950.

Chief Resident, Thoracic Surgery, University of Virginia Hospital, 1951.

Senior Assistant, General Surgery, University of Virginia Hospital, 1952.

Fellow in Surgery, The Lahey Clinic, 1953.

Chief Resident in Surgery, University of Virginia Hospital, 1954.

certification

American Board of General Surgery, 1954.

American Board of Thoracic Surgery, 1958.

hospital affiliation

Assistant Chief of Sugery, The Mason Clinic and Virginia Mason Hospital, since 1954.

Attending staff, Children's Orthopedic Hospital

Attending staff, Doctor's Hospital

Attending staff, King County Hospital

Attending staff, St. Francis Xavier Cabrini Hospital

teaching appointment

Clinical Assistant Professor of Surgery, University of Washington.

membership in medical societies

King County Medical Society

Washington State Medical Association

American Medical Association

Seattle Surgical Society

Pacific Coast Surgical Association

North Pacific Surgical Association

Pan-Pacific Surgical Association

Western Surgical Association

Washington State Chapter American College of Surgeons

Society for Surgery of the Alimentary Tract (founding member)

American Association for Thoracic Surgery

American College of Surgeons

American College of Chest Physicians
American Surgical Association

honor societies

The Raven Society, University of Virginia

World War II service

Captain, U.S. Army Medical Corps, 1945-47.

PUBLICATIONS

1 Acute renal insufficiency and the role of potassium with treatment by intestinal lavage. J Urol 66:645-660 Nov 51 (with R. W. Kelley).

2 Plasmacytoma of the lung. J Thorac Cardiov Surg 25:187-193, Feb 53 (with M. L. White Jr.).

3 Benign tumors of the esophagus. Ann Surg 139:312-324 March 54 (with D. P. Boyd).

4 Internal hernia after gastrectomy. Ann Surg 141:759-764 June 55 (with C. B. Morton and E. M. Alrich).

5 Thorazine jaundice. Bull Mason Clin 9:125-134 Dec 55 (with T. B. Gibbons and R. L. Reeves).

6 Report of one case of hematometra in a double uterus in a young girl. Bull Mason Clin 9:109-114 Sept 55 (with L. Annest).

7 Surgical aspects of ulcerative colitis, Arch Surg 72: 968-976 June 56 (with C. S. Stone Jr. and C. C. Pearson).

8 Surgery of arteriosclerosis. Bull Mason Clin 10:75 Sept 56 (with F. E. Cleveland).

9 Benign tumors and cysts of the esophagus. Amer J Surg 93:252-258 Feb 57 (with D. P. Boyd).

10 Acute cholecystitis in the elderly patient. Geriatrics 12:364-367 June 57 (with C. S. Stone Jr. and L. Annest).

11 Surgical management of diverticulitis. Special Exhibit. Mod Med 101-106 June 57 (with C. S. Stone Jr.).

12 Surgical management of ulcerative colitis. (Scientific exhibit p. 102-107) Grune and Stratton, publishers, 1957 (with C. S. Stone Jr. and C. C. Pearson).

13 Thromboembolic disease. Bull Mason Clin 11:60-69 June 57 (with R. P. Schutt, L. Annest, L. R. Schultz and G. Bansmer).

14 Surgical aspects of ulcerative colitis. Trans West Surg Assn 1957 (with C. S. Stone Jr. and C. C. Pearson).

15 Aneurysmoplasty for a large abdominal aneurysm. Surgery 43:334-339 Feb 58 (with E. R. Hipp Jr. and E. M. Alrich).

16 The use of nylon bifurcation grafts in arteriosclerosis. Western J Surg 66:276-281 Sept-Oct 58 (with G. H. Lawrence and L. Annest).

17 Pulmonary resection on recurrent spontaneous pneumothorax. Northwest Med 57:487-490 April 58 (with G. H. Lawrence and E. H. Morgan).

18 Surgical management of diverticulitis. Mod Med Ann 1958:89-94 (with C. S. Stone Jr.).

19 Adenocarcinoma of the vermiform appendix. Bull Mason Clin 12:1-6 March 58 (with H. Tesluk).

20 Ruptured aneurysm. Northwest Med 57:1001-1003 July 58.

21 Diverticulitis of the colon. Bull Mason Clin 12:31-48 June 58 (with C. S. Stone Jr. and S. W. Conroy).

22 The usefulness of scalene lymph node biopsy in pulmonary disease. Bull Mason Clin 12:75-87 Sept 58 (with G. Bansmer and G. H. Lawrence).

23 The technique of insertion of caval or femoral catheters. Bull Mason Clin 12:150-157 Dec 58 (with G. Bansmer).

24 The scalene lymph node biopsy. J. Thorac Cardiov Surg 303-313 March 59 (with G. H. Lawrence and G. Bansmer).

25 Surgical management of chronic pancreatitis. Amer J Surg 98:304-314 Aug 59 (with C. S. Stone Jr. and J. W. Baker).

26 Surgical management of chronic pancreatitis. (Special exhibit.) Arch Surg 79:951-955 Dec 59 (with C. S. Stone Jr.).

27 Diagnosis of gastrointestinal bleeding site by the use of radiochromate-tagged red cells. Bull Mason Clin 13:4, 111-118 Dec 59 (with J. K. Siemsen, R. P. Pillow, P. A. Ragen and H. Resluk).

28 Management of chronic pancreatitis. Bull Mason Clin 13:74-83 Sept 59 (with R. F. Jones, R. Clements, C. C. Pearson, C. S. Stone Jr., and H. W. Jones).

29 Problems of animal experimentation with pump oxygenator. Bull Mason Clin 13:43-55 June 59 (with H. B. Kellogg Jr. and G. H. Lawrence).

30 Surgical management of chronic pancreatitis. Trans Pacif Coast Surg Assn 304 1959 (with C. S. Stone Jr. and J. W. Baker).

31 Chronic pancreatitis. Arch Intern Med 105:320-323 (with R. Jones, R. Clements, C. C. Pearson, and C. S. Stone Jr.).

32 Application of physiologic studies to management of esophageal disorders. Bull Mason Clin 14:41-52 June 60 (with E. H. Morgan, K. W. Chapman, and H. B. Kellogg Jr.).

33 Studies of intraluminal esophageal and gastric pressure and pH. Bull Mason Clin 14:53-98 June 60 (with E. H. Morgan, J. K. Siemsen, K. W. Chapman, and D. S. Botseas).

34 Single-stage proctocolectomy and ileostomy for ulcerative colitis. Trans West Surg Assn 1961 (with C. S. Stone Jr. and J. W. Baker).

35 Objective evaluation of surgery for hiatus hernia and esophagitis. J Thorac Cardiov Surg 41:60-74 Jan 61 (with K. W. Chapman and E. H. Morgan).

36 One-stage abdominal proctocolectomy and ileostomy. Arch Surg 83:98-104 July 61 (with C. S. Stone Jr. and J. W. Baker).

37 Experimentation as an aid in management of esophageal disorders. Amer J Surg 102.240-253 1961 (with E. H. Morgan and H. B. Kellogg Jr.).

38 Studies of pH and pressure relationships in hiatus hernia and esophagitis. Chapter in book by H. N. Harkins and L. M. Nyhus, "Surgery of the Stomach and Duodenum" Little, Brown and Co., Boston, 1962.

39 Experimentation as an aid in management of esophageal disorders. Trans Pacif Surg Assn p 240 1961 (with E. H. Morgan and H. B. Kellogg Jr.).

40 Newer methods for localization of obscure small bowel bleeding. JAMA 179:23 Jan 62 (with R. P. Pillow, P. A. Ragen, J. K. Siemsen, and L. A. Walker).

41 Surgical management of obstruction of the superior vena cava. Dis Chest 42:2 Aug 62 (with G. H. Lawrence and P. Herron).

42 Objective assessment of gastroesophageal reflux secondary to hiatus hernia. Dis Chest 43:367-376 April 63 (with E. H. Morgan and D. K. Shelby).

43 Objective identification of chest pain of esophageal origin. JAMA 187:921-26 March 64 (with E. H .Morgan).

44 Surgical experiences in occlusive disease of the cervical carotid artery. Bull Mason Clin 18:1-40 March 64 (with J. S. Tytus).

45 New trends in thyroid cancer therapy. Bull Mason Clin 18:77-87 (with J. W. Baker, J. H. Crampton, H. W. Jones, H. B. Kellogg Jr., and E. H. Morgan).

46 Changing management of carcinoma of the thyroid. Amer J Surg 108:175-182 Aug 64 (with H. B. Kellogg Jr., J. H. Crampton, H. W. Jones, and J. W. Baker).

47 Midgut malrotation, volvulus, and obstipation. Bull Mason Clin 18:133 Sept 64 (with F. R. Dion and J. I. Antonius).

48 Anatomical approach for surgical correction of carotid insufficiency. Surg Clin N Amer 44:1175-1189 Oct 64 (with J. S. Tytus).

49 Anatomical approach for completing the proctectomy phase of a one-stage proctocolectomy for chronic ulcerative colitis. Surg Clin N Amer 44:1286-1296 Oct 64 (with J. W. Baker).

50 Arterial dysplasia; an important surgical lesion. Arch Surg 90:585-595 April 65 (with J. I. Antonius).

51 Cervical carotid arterial disease. Northwest Med 64:832 Nov 65 (with J. S. Tytus).

52 Pathophysiology and surgical repair of hiatal hernia. Bull Mason Clin 19:167 Dec 65 (with J. A. Tobias and E. H. Morgan).

53 Newer concepts of the pathophysiology of hiatal hernia and esophagitis. Amer J Surg 111:70 Jan 66 (with J. A. Tobias and E. H. Morgan).

54 Evaluation of cardiovascular lesions by means of an impedance plot at the time of surgical correction. Bull Mason Clin 20:1 March 66 (with M. P. Spencer,

D. L. Johnson, G. H. Lawrence, and J. S. Tytus).

55 Reappraisal of single-stage proctocolectomy and ileostomy. To be published in Reppraisal section of Surgery.

56 Esophageal hiatal hernia. To be published in Proc of the Soc for Surg of the Almentary Tract.

57 The beginning of a foundation. Northwest Med 65:10 847-850, Oct. 1966.

58 Balanced Postgraduate curriculum. Northwest Med 65:12 1105.

59 Worth fighting for. Northwest Med 65:11 979-980 Nov. 1966.

60 Lysosomes in atheroscelrosis, Bull Clin Med 20:4 Dec 1966.

EXHIBITS

1 Renal failure. American Urological Association, Washington, D.C., 1951.

2 Elective surgery for diverticulitis (with C. S. Stone, Jr.), American College of Surgeons, Oct. 8-12, 1956.

3 Surgical management of ulcerative colitis. (with C. S. Stone, Jr., and C. C. Pearson), American Medical Association, June 2-7, 1957.

4 Management of chronic pancreatitis. (with C. S. Stone Jr., R. Clements and Hugh Jones), American Medical Association Atlantic City, June 1959.

5 Practical evaluation of gastroesophageal disorders. (with E. H. Morgan, R. Jones, C. C. Pearson, and W. Taylor), Washington State Medical Association, Sept 1961.

PRIZES

1 John Horsley Memorial Prize for Original Research on Renal Failure, 1951.

2 First Prize for Original Research, American Urological Association, 1951.

3 Honorable mention, AMA Exhibit in New York, 1961.

MOVIES

1 Carotid endarterectomy. TV, Washington State Medical Assn, Sept 63 (with J. S. Tytus).

2 Successful resection of renal artery aneurysms with end-to-end anastomosis for hypertension. Film Spectacular, American College of Surgeons, Chicago, 1964. Washington state chapter, American College of Surgeons 1963.

3 Renal artery endarterectomy for hypertension. Shown at annual meeting, Seattle, surgical society, 1964.

4 Superior mesenteric and celiac axis endarterectomy for abdominal angina. To be shown at the American College of Surgeons 1967.

5 Surgical correction of hiatus hernia. To be shown at Cine Clinic, American College of Surgeons, 1967.

Committee Activities

New Sports Committee Begins Work

The newly formed WSMA Committee on the Medical Aspects of Sports met for the first time as a special WSMA Committee Dec. 3. Under the chairmanship of Harry H. Kretzler Jr., Seattle (left), the Committee will review physical qualifications for participation in interscholastic sports, junior trainer programs, courses at community colleges on the medical aspects of sports for physicians and coaches, and the role and need of a team physician. Shown meeting with Dr. Kretzler were Walter J. Kennedy Jr., Yakima, staff man Mr. George Morford, Seattle, Orvis A. Harrelson, Tacoma, Vaughn Smith, Wenatchee, and WSMA secretary Marilyn Brown.

Members of the Medical Aspects of Sports Committee not shown are T. R. Ingham, Olympia, Lawrence M. Knopp, Seattle, James D. Layman, Seattle, O. Charles Olson, Spokane, and Erwin R. Slade, Snohomish.

School Health Keeps Committee Busy

The School Health Committee is one of the WSMA's most productive units. Here, members Donald L. McGuinness, Yakima, Richard B. Jarvis, Seattle, Orvis A. Harrelson, Tacoma, and Chairman Clark W. Biedel, Bremerton, review data concerning the effect of noxious fumes and gases produced by materials used in school classes with Mr. Peter Breysse and Harley Bovee, Ph.D., of the Environmental Health Division, UWSM.

The committee has received compliments from the State PTA and Superintendent of Schools Louis Bruno for its interest and work in developing guidelines for a curriculum in health, a booklet on school health policy, and for instigating the biennial WSMA Physicians and Schools conference.

Other members are Daniel A. Lagozzino, Everett, Harry H. Kretzler Jr., Seattle, Carl A. Brakel, Spokane, William J. Henry, Twisp, Darell H. Larson, Moses Lake, and Jesse Q. Sewell, Harrington.

1. Philip A. Peter, member of the Vehicle Safety Committee watches incoming messages at the office of the Department of Motor Vehicles. Complete information on vehicle registration and driver records is available within minutes to enforcement officers or court officials. New equipment, soon to be installed, will provide the information in milliseconds. 2. Mr. David T. Kirk explains the key punch section, using two place machines. Card is punched, then passed to the second operator who keys the same data. Discrepancy is noted instantly. The Department's records are virtually error-free. 3. Mr. Charles Poole points out the numerous inter-connections between data processing machines in the most computerized motor vehicle department in the United States. Members of the Committee: Andrey W. Stevenson, H. L .Hartley, Gilbert G. Eade, Philip A. Peter. 4. At Headquarters Office of Washington State Patrol, the Committee inspects the communication system. Radio contact can be made by officers on the highways and teletype communication is maintained with all states except Alaska and Hawaii, as well as with seven District Offices of the Patrol. Gilbert G. Eade, Jack Crabs, medical advisor to the Department of Motor Vehicles, Captain DeWitt Whitman, Philip A. Peter, Mr. Richard A. Adamson, Andrey W. Stevenson, Mr. C. E. Kroum.

Vehicle Safety Committee hopes to enlist active support of every member of the Association in attempts to reduce death and injury from motor vehicle accidents. This is no overnight task, but must go on for years, through many courses of action.

A meeting of the safety committee was held in Olympia, December 3, to obtain information on activities of the Department of Motor Vehicles and the State Patrol, with which agencies the committee expects to work closely. The background information obtained will be useful in further work of the committee, since interests and purposes of the two agencies are identical to those of the medical profession, namely, prevention of death and injury.

Previously, the committee had aided the Department of Motor Vehicles in redesigning the form on which physicians report examination of driver license applicants who have had chronic disease. A medical advisor for the department was recommended and Jack Crabs, of Olympia, now fills that post. A significant change in the physician's report was made by eliminating recommendation on issuing license to the applicant. Issuance of the license is clearly the responsibility of the Department of Motor Vehicles and not that of the physician. No applicant for license to drive can now accuse the physician of withholding a license, since the physician is expected only to report his findings.

The committee has also been interested in developing research projects. Early in the discussions it became apparent that no one knows very much about the need for physical examination of applicants for driver's licenses, or the effect of physical disability on accident rates. A research project has been recommended but not yet established. It will necessarily be a long-term study. Several other studies on causes of accidents are anticipated, one now well along in planning and others under consideration. It is hoped that most of the work will be done at the University of Washington School of Medicine, thus bringing into close cooperation the Department of Motor Vehicles, the State Patrol, the Medical School and the State Medical Association.

The committee has also endorsed the legislative program proposed by the Citizens Advisory Committee to the Joint Committee on Highways, including support for an implied consent statute and lowering of the presumptive limits for blood alcohol. The Public Laws Committee has been asked to support this program during the 1967 ligislative session and the Vehicle Safety Committee earnestly solicits the interest and active support of every member of the Association.

Call for Scientific Papers

Paul W. Herron, chairman, Scientific Program Committee invites members to submit a brief two or three paragraph abstract, with title, of the scientific paper they would like to present at the 1967 Washington State Medical Association Annual Meeting, Sept. 10-13 in Seattle.

A portion of the scientific program will be devoted to intensive care and patient monitoring and papers in this area, as well as on all subjects, are encouraged. Abstracts are needed as early as possible as the Program Committee is developing preliminary plans for the meeting.

The Scientific Program Committee will review all abstracts submitted and those accepted will be scheduled for presentation during specialty and general sessions. Abstracts should be sent to Dr. Herron at the WSMA Central Office, 1800 Terry Avenue, Seattle 98101.

Scientific Exhibit Applications Available

Applications for scientific exhibit space at the 1967 Washington State Medical Association Annual Meeting are available now, according to Chairman of the Scientific Exhibit Committee, John D. Allen.

Exhibits will be selected on the basis of those providing new and useful techniques for the practicing physician. If accepted, they will compete for the Aesculapius Award, which consists of $200 cash and a certificate.

Physicians wanting applications should write Dr. Allen at WSMA Central Office, 1800 Terry Avenue, Seattle 98101.

Important Position for Dr. Nyhus

LLOYD M. NYHUS, M.D.

Lloyd M. Nyhus, Professor of Surgery at University of Washington School of Medicine, has been named Head of the Department of Surgery and Warren H. Cole Professor of Surgery at the University of Illinois College of Medicine, Chicago. He assumes his new duties March 1, 1967.

Dr. Nyhus is a native of Mt. Vernon, Washington. He earned his baccalaureate degree at Pacific Lutheran University, Tacoma, and his medical degree at the Medical College of Alabama, Birmingham, graduating in 1947. He served internship and residency at King County Hospital, Seattle, and became a member of the faculty at University of Washington School of Medicine in 1954. One year later he was given a Guggenheim Fellowship. Studies took him to Glasgow, Scotland, for work at the Faculty of Medicine, University of Glasgow, and to Lund, Sweden, where he spent several months at Medicinska Fakulteten Universitetet i Lund.

Dr. Nyhus has been a prolific author and editor, and he is constantly in demand as a guest speaker at surgical meetings or postgraduate sessions. Best known of his writings are the two textbooks coauthored with Henry N. Harkins, who has been his chief and mentor since 1947. They are *Surgery of the Stomach and Duodenum,* published by Little Brown and Company, 1962, and *Hernia,* published by Lippincott, 1964. They also are associated editorially with *Review of Surgery,* of which Dr. Harkins is Editor-in-Chief and Dr. Nyhus is Editor.

Since 1964 Dr. Nyhus has been a member of the Editorial Advisory Board of NORTHEST MEDICINE and has made a number of suggestions for improvement of the material presented. He has been a sharp manuscript critic, usually making brief but pointed comment on the papers submitted for his review. There has never been any doubt about his position or the soundness of his analysis

UWSM Offers Continuing Education Course

The University of Washington School of Medicine is offering a continuing medical education course, Physical Medicine and Rehabilitation in Office Practice, Jan. 27-28, 1967.

The course, intended to present the current procedures, tools, and principles of physical Medicine and Rehabilitation which can be utilized for office practice, will consist of lectures, demonstrations, and patient presentations.

Faculty includes two guest instructors: Rene Cailliet, Clinical Professor of Physical Medicine and Rehibilitation, University of Southern California School of Medicine; Chief of the Department of Physical Medicine, Southern California Permanente Medical Group and David C. Symington, Associate Professor and Head, Department of Rehabilitation Medicine, Queen's University, Kingston, Ontario.

The two day course is open to licensed doctors in medicine and surgery in the state of Washington and graduates of medical schools approved by the Council on Medical Education and Hospitals of the American Medical Association. Registration should be in advance and will be limited to available space.

Washington Society of Internal Medicine

John H. Lindberg, Seattle, is the new President of the Washington State Society of Internal Medicine. Other officers are Ralph Nuzum, Yakima, President-Elect; Alvin J. Thompson, Seattle, Secretary-Treasurer; and Robert Kramer, Pasco; E. Creelman, Bremerton; and Stuart Pritchard, Olympia. Council members.

OBITUARIES

DR. ARTHUR M. SONNELAND, *78, of Bellingham, died Oct. 20, 1966. Dr. Sonneland was born in Harlan, Iowa, and was a graduate of the University of Nebraska. In 1912 he was graduated from Creighton University Medical School in Omaha. He practiced in Norfolk, Nebraska, and did graduate work in Vienna in 1930-31, subsequently locating in Bellingham where he was in general practice until his death. Cause of death was acute cardiac arrhythmia and pulmonary edema on the basis of arteriosclerotic heart disease.*

DR. HERMAN G. KOREY, *chief of medicine at Providence Hospital, Seattle, died Oct. 6, 1966. He was 55.*

Dr. Korey was born in Chicago, Ill., and was graduated from Rush Medical College, Chicago, in 1937. He served his internship and residency at Michael Reese Hospital, Chicago, and settled in Seattle in 1946.

He served as an officer in the Army Medical Corps from 1942 to 1946 and had been a medical adviser for local Draft Board No. 3 since 1946.

Dr. Korey was a member of the American and Washington Societies of Internal Medicine and the Seattle Academy of Internal Medicine. He was a fellow of the American College of Physicians. Cause of death was arteriosclerotic heart disease.

DR. CEDRIC E. M. TUOHY, *73, of Snohomish, died Sept. 8, 1966. Dr. Tuohy was born in El Paso, Texas, and was a 1918 graduate of the McGill University Faculty of Medicine, Montreal, Quebec, Canada. He served in the Canadian Army medical corps in WW I. He had been in practice in Snohomish since 1947 and health officer for that city for many years. Cause of death was acute coronary artery occlusion.*

DR. RICHARD INGERSOLL MCCLELLAND, *41, Seattle, died Sept. 22, 1966. Dr. McClelland was born in Seattle and was a 1948 graduate of St. Louis University School of Medicine. Cause of death was massive gastrointestinal bleeding with shock from probable esophageal varices due to Laennec's cirrhosis.*

DR. ROBERT HENRY FINLEY, *Chehalis, died Sept. 6, 1966. He was 87. Dr. Finley was born in Kentucky and graduated in 1906 from Hospital College of Medicine, Louisville. He established his practice in Washington in 1924 specializing in otolaryngology. Cause of death was bronchopneumonia.*

DR. VICTOR SCOTT ARMSTRONG, *Seattle, a pioneer in aviation medicine, died July 31, 1966. Born December 30, 1889, in South Dakota, Captain Armstrong graduated from the University of Illinois College of Medicine in Chicago in 1917. He was then commissioned in the Navy and earned his aviator's wings in 1917. During the first World War, he commanded a base hospital in France. He served in the Navy Medical Corps for 35 years before retiring in 1951. His death, at age 76, was due to carcinoma of the pancreas.*

DR. ARTHUR C. KUEHNER, *69, of Raymond, Pacific County, Washington, died Aug. 21, 1966. Dr. Kuehneh was born in Chehalis, Washington, and was a 1924 graduate of Northwestern University Medical School, Chicago. He was well known in the Raymond area where he practiced for 40 years. He was a member of the American College of Surgeons and the American Society of Abdominal Surgeons. Cause of death was cardiac arrest due to atreriosclerotic heart disease with auricular fibrillation.*

Additional obituaries on page 125

PRESIDENT'S page

LUCIUS D. HILL, III, M.D.

The First Phase

The explosion of medical knowledge and technology demands an upgrading of continuing medical education.

On December 22, 1966, a meeting was held which in time may be looked upon as an important milestone. Officials from the WSMA met with Jack Lein, Director of Continuing Education at the University of Washington; William Robertson, Medical Director of the University Hospital; Donal Sparkman, coordinator of the Regional Medical Program; James Haviland, member of the AMA Council on Medical Education; and Roland Pinkham, president of the Washington Medical Education and Research Foundation. These men have been active in the field of postgraduate medical education. Specifically Dr. Sparkman, coordinator of the Regional Medical Program, has defined one of the chief aims of the Program as promotion of continuing medical education, while Dr. Robertson and Dr. Lein, by their activities, have already put the University of Washington in the forefront of continuing medical education. These men, working with the WSMA, are initiating a grant proposal which can place this region of Alaska and Washington in a leadership role in continuing medical education.

The first phase in this proposal is to survey the involvement of physicians in courses of continuing education, in an effort to determine to what extent physicians in the region participate in courses and programs. These data will aid in determining the sources of physicians' information, including meetings, journals, grand rounds, books, and other media. This in turn will aid in structuring courses that will secure greater physician involvement.

The second part of this proposal will be a study of physician opinion of the effectiveness of the existing programs of continuing education and to determine to what extent their present methods of education, whatever they may be, are meeting the perceived needs of the physician.

The third, and more involved phase of the proposal, will be carried on by Jack Lein and William Robertson, who have already been awarded a grant, the main purpose of which is to establish criteria for pre- and post-testing of physicians who are participating in postgraduate programs. In our discussion with the officials of the Regional Medical Program in Washington, D.C., it became apparent that criteria for testing the effectiveness of postgraduate programs have yet to be developed. This third phase, therefore, presents a real challenge and an opportunity to make a significant contribution to the field of postgraduate education.

At the December 22 meeting, Mr. Richard Gorman, WSMA Executive Secretary, and Dr. Robertson jointly presented a detailed proposal of action. A committee to compile a suitable questionnaire will be appointed to work closely with the regional program and with the University. This questionnaire will be sent to all physicians in this region, but only after a great deal of preliminary planning and thought has gone into the questionnaire. In addition, the WSMA and our Foundation, will acquaint physicians throughout the region with the importance of this survey and their participation in it. Only after obtaining an accurate appraisal of the physician's interests, participation and needs in the field of medical education, can a sound and comprehensive postgraduate medical education program be constructed.

Representatives at the meeting were unanimously in favor of this approach. In discussing this proposal with the officials of the Regional Medical Program in Washington, D.C., it was obvious that the objectives and goals of this study are looked upon with enthusiasm. This enthusiasm is engenedered by the fact that millions of dollars are being spent on postgraduate education, and yet the true needs and participation of physicians as well as the effectiveness of the programs and the specific need for improvement and revisions are unknown quantities. Through a cooperative effort in this region, we have an opportunity to answer these questions.

The ultimate goal of the program of bringing the latest information and facilities to the physician should make it clear to all physicians who participate in the survey that they, and their particnts, will ultimately reap benefits. ■

Lucius Hill M.D.

fluocinolone acetonide — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

controls infected inflammatory dermatoses that start from scratch

Neo-Synalar®

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Cream

The "itch-scratch" cycle usually associated with inflammation often results in infected dermatoses because broken skin surfaces are particularly vulnerable to pathogenic bacteria.[1] To treat infected inflammatory dermatoses, Neo-Synalar Cream combines the most active topical corticosteroid with a highly reliable antibiotic generally reserved for topical application.

In Neo-Synalar, fluocinoline acetonide controls the inflammation and provides rapid relief from associated pruritus. At the same time, its antibacterial component — neomycin — combats superficial infection caused by many gram-positive and gram-negative bacilli[2] that often colonize and thrive on abraded skin.[1]

A specially formulated vanishing cream base that is greaseless and odor free makes Neo-Synalar cosmetically appealing, and encourages greater patient cooperation.

controls the infection

stops the scratch

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Neomycin rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Neo-Synalar under certain conditions. **Availability:** Neo-Synalar Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

References: 1. Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. **2.** Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.

Washington State Medical Association

1966 - 1967

Officers, Board of Trustees, and Committees

OFFICERS

		Term Expires
President	Lucius D. Hill, Seattle	1967
President- Elect	Charles D. Muller, Bremerton	1967
Past President	Carl P. Schlicke, Spokane	1967
Vice President	Herbert C. Lynch, Yakima	1967
Secretary-Treas.	Carl E. Mudge, Seattle	1969
Ass't. Secy-Treas.	William F. Mead, Seattle	1967
AMA Delegate	Peter T. Brooks, Walla Walla	12/31/67
AMA Delegate	E. Harold Laws, Seattle	12/31/67
AMA Delegate	Robert B. Hunter, Sedro Woolley	12/31/68
AMA Delegate	Waldo O. Mills, Seattle	12/31/68
Speaker of House	Heyes Peterson, Vancouver	1967
Finance Com. Ch.	Wilbur E. Watson, Seattle	1968
Medical Def. Ch.	Donald T. Hall, Seattle	1967

BOARD OF TRUSTEES

Trustee	Warren Bergholz, Bellingham	1967
Trustee	Robert M. Bond, Walla Walla	1967
Trustee	Douglas P. Buttorff, Tacoma	1967
Trustee	Robert C. Coe, Seattle	1967
Trustee	Warren J. Kraft, Wenatchee	1967
Trustee	William H. Myers, Everett	1967
Trustee	John A. Nelson, Longview	1967
Trustee	Ralph F. Nuzum, Yakima	1967
Trustee	Ray V. Rose, Pasco	1967
Trustee	J. Walfred Wallen, Burlington	1967
Eastern District:		
Trustee	A. Bruce Baker, Spokane	1968
Trustee	Louis S. Dewey, Omak	1967
Trustee	LaRue S. Highsmith, Spokane	1968
Trustee	Harold L. Tracy, Moses Lake	1967
Western District:		
Trustee	H. Paul Dygert, Vancouver	1967
Trustee	W. Maurice Lawson, Seattle	1968
Trustee	Stanley W. Tuell, Tacoma	1968
Trustee	G. Marshall Whitacre, Tacoma	1967

DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

(Elected by the House of Delegates for two-year terms)

		Term Expires
Delegate	Peter T. Brooks, Walla Walla	12/31/67
Alternate	Carl P. Schlicke, Spokane	12/31/67
Delegate	Waldo O. Mills, Seattle	12/31/68
Alternate	Robert A. Tidwell, Seattle	12/31/68
Delegate	Robert B. Hunter, Sedro Woolley	12/31/68
Alternate	Heyes Peterson, Vancouver	12/31/68
Delegate	E. Harold Laws, Seattle	12/31/67
Alternate	Quin B. DeMarsh, Seattle	12/31/67

COMMITTEES

(The President is an ex-officio member of all Committees)

EXECUTIVE—Standing Committee:

The Executive Committee shall consist of the President, President-Elect, Immediate Past President, Secretary-Treasurer, and the Vice President. The Immediate Past President shall be Chairman of the Executive Committee. (1966 House of Delegates). **PURPOSE:** Shall review and pass on all bills incurred by the Association and must approve same before Secretary-Treasurer may pay them; shall prepare and present a general fund budget, with approval of the Finance Committee; shall supervise and direct the Executive Secretary and other employees; shall exercise, (except when the Board of Trustees is in session), any and all powers of the Board of Trustees and the management of the affairs and business of this Association. (1940 House of Delegates) (1966 House of Delegates).

Carl P. Schlicke, Spokane, **Chairman,**
Past President
Lucius D. Hill, Seattle, President
Charles D. Muller, Bremerton, President-Elect
Herbert C. Lynch, Yakima, Vice President
Carl E. Mudge, Seattle, Secretary-Treasurer
Mr. Henry E. Kastner, Legal Counsel, Seattle

AGING POPULATION COMMITTEE—Special Committee:

(Appointed annually by the PRESIDENT.) **PURPOSE:** Shall study health problems of this age group; shall determine how these people can continue to work in business and industry and not become dependent on society for their livelihood. (1949 House of Delegates)

Frederick J. Schwind, Tacoma, **Chairman**
Dexter R. Amend, Spokane
Leonard Asmundson, Enumclaw
Sherburne W. Heath Jr., Seattle
Philip O. C. Johnson, Seattle
Howard Pyfer, Seattle
Staff: Mr. George W. Morford
Mr. Dennis Erickson

BASIC SCIENCE COMMITTEE—Special Committee:

(Appointed by the PRESIDENT.) **PURPOSE:** Shall represent the Association in the Legislative Council's investigations of the Basic Science Law, and study proposed changes in the Law (1962 BT)

Herman S. Judd, Tacoma, **Chairman**
Alfred O. Adams, Spokane
Gordon A. Logan, Seattle
John W. Settle, Jr., Olympia
Staff: Mr. Harlan R. Knudson

BLOODBANK, AD HOC COMMITTEE ON—Special Committee:

(Appointed by the PRESIDENT.) **PURPOSE:** to study blood banking problems; to draft suggested guiding principles for the operation of bloodbanking in the State. (Submit report to the Board of Trustees and the House of Delegates at its meeting in September, 1967.)

Frederick E. Geisert, Yakima, **Chairman**
Ian Black, Mount Vernon
Oscar O. Christianson, Spokane
Quin B. DeMarsh, Seattle
Robert P. Gibb, Bellingham
Staff: Mr. George W. Morford

CIVIL DISASTER COMMITTEE—Standing Committee:

(Fourteen (14) members appointed by the President to serve three-year staggered terms. (4) members to serve 3-year terms; (6) members to serve 2-year terms; (4) members to serve 1-year terms. The Chairman shall be appointed by the PRESIDENT.) **PURPOSE:** Shall alert and prepare for action medical and allied health professions, and the public, in case of disaster; shall cooperate insofar as possible with the state and federal government in these endeavors. (1950 EC; Rev. 1957; Rev. 1963 House of Delegates)

	Term Expires
E. Donald Lynch, Yakima, **Chairman**	1967
Robert V. Bourdeau, Seattle	1969
Frank H. Clark, Bellingham	1968
A. G. Corrado, Richland	1969
H. Dewey Fritz, Cathlamet	1968
Milton P. Graham, Aberdeen	1969
D. C. Higgins, Spokane	1969
Philip N. Hogue, Seattle	1967
George R. Kingston, Wenatchee	1968
Harry H. Kretzler, Sr., Edmonds	1968
Merritt D. Moon, Longview	1968
K. M. Morrison, Port Angeles	1969
Glen S. Player, Seattle	1967
John L. Whitaker, Bremerton	1967

Staff: Mr. George W. Morford
Mr. Dennis Erickson

COMMITTEE ON COMMUNICABLE DISEASES—Special Committee:

(Appointed by the PRESIDENT.) **PURPOSE:** To develop and implement, in cooperation with county medical societies, regional venereal disease workshops for teachers. (1965 Board of Trustees) It is further recommended that the Committee on Communicable Diseases be continued and consideration be given to expansion of its activities into other areas of communicable disease control. (1966 House of Delegates)

John M. Shaw, Tacoma, Chairman
Richard F. Dion, Seattle
Conrad A. DeLateur, Yakima
James P. Rotchford, Spokane

COMMUNITY HEALTH SERVICES STUDY GROUP, AD HOC COMMITTEE—Special Committee:

(Appointed by the PRESIDENT.) **PURPOSE:** Shall participate (with public health officers and others) in an eventual definition of the role of the public health officer and the scope of public health functions and services in our state. (1964 Board of Trustees)

LaRue S. Highsmith, Spokane, **Chairman**
J. E. Fischnaller, Omak
Alvin Katsman, Seattle
Quentin Kintner, Port Angeles
Donovan O. Kraabel, Seattle
Gilman E. Sanford, Spokane
Herman J. Schroeder, Seattle
David L. Sparling, Tacoma
Arnold C. Tait, Sunnyside
Staff: Mr. Harlan R. Knudson

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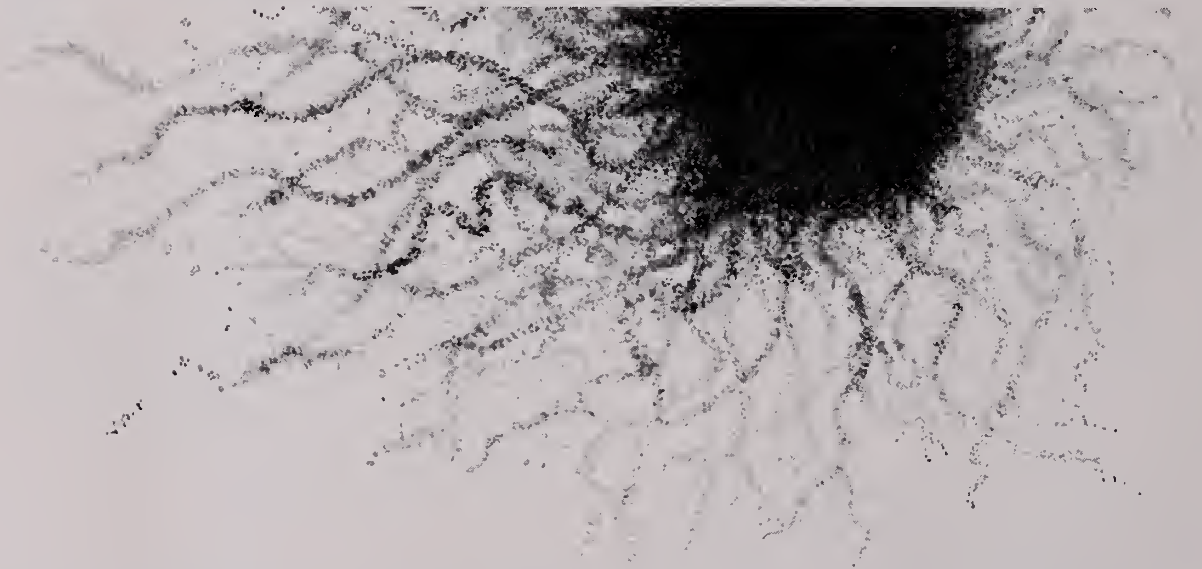
SQUIBB NOTES ON THERAPY

CANDIDA ALBICANS: NECESSARY EVIL?



How serious is monilial infection? It is hard to prove; but when host resistance drops, monilial infection can be very serious. Consider the problem of monilial infection generally. Two investigators postulate that secondary thrush of the bronchi caused by *C. albicans* may pave the way for bacterial invasion of the lungs.[2] Monilial pyelonephrosis in a young child presumably was related to a bloodstream spread of thrush from the alimentary tract.[3]

Thus, the physician browsing in the literature may wonder if *C. albicans* is not more pathogenic than he had thought. In fact, Seelig[4] concluded, after an exhaustive literature review, that this organism, only slightly pathogenic in high concentrations on the mucosa of the normal subject, increases markedly in pathogenicity when host resistance drops.

Antibiotics and increased candidiasis Almost 20 years of clinical experience has established the usefulness of the tetracyclines beyond question. All "...possess a wide range of antimicrobial activity against gram-positive and gram-negative bacteria, which overlaps that of penicillin, streptomycin, and chloramphenicol."[5]

But...monilial superinfection associated with tetracyclines and other broad-spectrum antibiotics persists. Indeed, the incidence of secondary candidal fungal infections associated with antibiotic therapy has continued to rise. Analysis of autopsies in a general hospital from 1919 to 1955 showed an increase in secondary fungal infections since 1947.[6] More yeastlike fungi have been isolated from pediatric patients during the antibiotic era.[7] In fact, although some investigators question the clinical significance of Candida identification in clinical studies, "...the preponderance of evidence indicates that the use of antibiotics is associated with

Monilial overgrowth continues to complicate tetracycline therapy...yet the usefulness of this broad-spectrum antibiotic is beyond question.

> "The tetracyclines are firmly established as very valuable agents in the therapy of a variety of infectious diseases."[1]

an increased incidence of candidiasis...."[4] Moreover, certain antibiotics in particular – among them the tetracyclines – have been implicated in a variety of superinfections.[8]

Benefits vs. risks
The tetracyclines are obviously far too valuable to be disregarded – in spite of fungal risks. But: *the risk of secondary monilial infection can be greatly minimized in the tetracycline therapy program.* The prophylactic use of an antifungal agent along with an antibiotic, long considered logical,[9] has been shown by clinical experience to exert protective effect against candidal superinfection.

Superior protection from monilial superinfection as demonstrated in the laboratory
In particular, Mysteclin-F, a combination of tetracycline with amphotericin B, an antimonilial that is significantly more potent *in vitro* against *C. albicans* and other Candida species than is nystatin,[10] is valuable in preventing monilial overgrowth. Amphotericin B has shown a high degree of activity *in vitro* against Candida species found in the intestinal tract. Moreover, it undergoes virtually no absorption from the gut, thus avoiding risk of systemic side effects.

Certain patients are particularly susceptible to monilial complications. They are: infants, the aged, the debilitated, diabetics, women (particularly during pregnancy), and patients receiving prolonged or high-dosage antibiotic therapy or corticosteroid hormones.[11] But, since it is impossible to predict infallibly which patients will develop monilial complications, Mysteclin-F is a logical choice whenever tetracycline therapy is indicated.

Is *Candida albicans* a necessary evil? Hardly, with Mysteclin-F.

References
1. Weinstein, L., in Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 3, New York, Macmillan, 1965, p. 1253.
2. Winner, H. I., and Hurley, R.: Candida Albicans, London, 1964, J. A. Churchill Ltd., 1964, pp. 105-119.
3. Vergez, J., and Simon, R.: Mém. Acad. Chir. No. 17/18, 79:422, 1953.
4. Seelig, M. S.: Amer. J. Med. 40:887 (June) 1966.
5. Weinstein, L., *op. cit.*, p. 1243.
6. Keye, J. D., Jr., and Magee, W. E.: Amer. J. Clin. Path. 26:1235 (Nov.) 1956.
7. Carpenter, A. M.: Amer. J. Clin. Path. 25:98 (Jan.) 1955.
8. Weinstein, *op. cit.*, p. 1186.
9. Welch, H.: Antibiot. Med. & Clin. Ther. 3:375 (Feb.) 1956.
10. Stough, A. R.; Groel, J. T., and Kroeger, W. H.: Antibiot. Med. & Clin. Ther. 6:653 (Nov.) 1959.
11. Welch, H.: Antibiot. Med. 2:79 (Feb.) 1956.

Available as: *Capsules in two potencies:* the equivalent of 250 mg. tetracycline hydrochloride with 50 mg. amphotericin B, and the equivalent of 125 mg. tetracycline hydrochloride with 25 mg. amphotericin B, both buffered with potassium metaphosphate; *Syrup* (125 mg. tetracycline [hydrochloride equiv.] buffered with potassium metaphosphate, and 25 mg. amphotericin B per 5 cc.); *Pediatric Drops* (100 mg. tetracycline [hydrochloride equiv.] buffered with potassium metaphosphate, and 20 mg. amphotericin B per cc.).

Contraindications: Hypersensitivity to either component.

Warning: If renal impairment exists, lower-than-usual doses are indicated to avoid systemic accumulation and possible liver toxicity; on prolonged use, tetracycline serum level determinations may be advisable.

Photodynamic reactions, although rare with tetraoycline, may occur. Advise photosensitive patients to avoid direct sunlight.

Precautions: Watch for signs of secondary infection due to nonsusceptible organisms; discontinue drug or institute appropriate therapy if they occur. Use of tetracycline, particularly long-term use, during pre- and post-natal tooth development may cause discoloration of teeth.

During long-term therapy, perform periodic renal, hepatic and hematopoietic function studies. Increased intracranial pressure with bulging fontanels has been observed rarely in infants taking therapeutic doses of tetracycline.

Side Effects: Nausea, vomiting, and diarrhea.

For full information, see Package Insert.

Mysteclin®-F

Squibb Tetracycline-Amphotericin B (Fungizone®) with Potassium Metaphosphate

broad-spectrum effectiveness with superior antifungal protection

SQUIBB 'The Priceless Ingredient' of every product is the honor and integrity of its maker.

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EDUCATION RESEARCH FOUNDATION COMMITTEE —*Special Committee:*

(Members appointed by the PRESIDENT.) **PURPOSE:** Shall stimulate interest among the physicians of the Washington State Medical Association for the contribution of funds to the American Medical Association Education Research Foundation; shall organize, publicize and promote activity among the county chairmen and the Women's Auxiliary in the promotion and collection of funds for the AMA-ERF. (1962 House of Delegates (This was formerly the Medical Education Campaign Fund Committee.)

Richard O. Diefendorf, Bremerton, **Chairman**
David H. Dillard, Seattle
Arnold J. Herrmann, Tacoma
Staff: Mr. George W. Morford

FINANCE COMMITTEE—*Standing Committee:*

(Three (3) members, one elected annually for a three-year term by the HOUSE OF DELEGATES, and the Secretary-Treasurer. The Committee shall annually designate its own Chairman.) **PURPOSE:** Shall supervise funds, investments and expenditures of the Association; shall prepare a budget of the Association's expenditures for the ensuing year, which shall be presented to the Board of Trustees for approval prior to January 31. (Article IX, Section 3, of the Constitution.)

	Term Expires
Wilbur E. Watson, Seattle, **Chairman**	1968
Donald T. Hall, Seattle	1969
Carl E. Mudge, Seattle (Secy-Treas.)	1969
Harold T. Pederson, Spokane	1967

GRADUATE MEDICAL EDUCATION COMMITTEE—*Standing Committee:*

(Three (3) members appointed by the PRESIDENT to serve three-year staggered terms.) **PURPOSE:** Shall act in conjunction with the Board of Trustees to provide post-graduate courses and other instruction for the component societies and the members of the Association; shall cooperate with the AMA Council on Medical Education. All questions pertaining to graduate medical education shall be referred to this Committee for consideration and action. (1906. Rev. 1956 House of Delegates; 1957 House of Delegates)

	Term Expires
John N. Lein, Redmond, **Chairman**	1968
Louis S. Dewey, Omak	1969
Thomas F. Sheehy, Seattle	1967

Staff: Mr. George W. Morford

GRIEVANCE COMMITTEE—*Standing Committee:*

(Nine (9) members elected by the BOARD OF TRUSTEES to serve three-year staggered terms. No two members to be from the same local society.) **PURPOSE:** Shall investigate and supervise the ethical deportment of the members of the Association; shall confine its actions to handling patient-doctor, doctor-doctor, or doctor-third party complaints that are referred to it by a grievance committee of a component society or appealed to it by either party of the grievance; shall also have jurisdiction of all questions of alleged grievances originating in areas in which there is no functioning county society and in instances where no grievance committee of a component society has been appointed, or if appointed, fails to function; shall have no disciplinary authority; shall serve in an advisory capacity to county grievance committees. (1966 House of Delegates).

	Term Expires
John R. Hahn, Arlington, **Chairman**	1969
Peter T. Brooks, Walla Walla	1969
Earl I. L. Cilley, Mt. Vernon	1967
Robert E. Florer, Seattle	1968
H. Dewey Fritz, Cathlamet	1969
David W. Gaiser, Spokane	1968
Ross M. Galvin, Centralia	1967
Siegfried F. Herrmann, Tacoma	1967
Arthur J. Herstad, Bremerton	1968

Staff: None Assigned.

INDUSTRIAL INSURANCE COMMITTEE—*Standing Committee:*

(Seven (7) members elected by the BOARD OF TRUSTEES. Two (2) members shall be elected for one-year terms; two (2) shall be elected for two-year terms; and three (3) shall be elected for three-year terms; thereafter, members shall be elected for three-year terms as vacancies occur. The seven (7) members shall represent (1) General Practice; (2) Internal Medicine-Cardiology; (3) Neurology and Neurosurgery; (4) Orthopedics; (5) Psychiatry; (6) Physical Medicine, and (7) Surgery. The Committee is authorized to appoint as consultants a member from each medical specialty and medical sub-specialty not represented on the Committee.) **PURPOSE:** Shall be the Association's sole and exclusive agent in all contracts, negotiations, and relationships between the Association and the Department of Labor and Industries; shall act as the Medical Advisory Committee of the State Department of Labor and Industries. (1966 House of Delegates).

Duncan Robertson, Seattle, Chairman
Sherburne W. Heath, Jr., Seattle
Frank C. Henry, Seattle
S. N. Berens, Seattle
David B. Rowlett, Seattle
Robert W. Florence, Tacoma
John H. Lindberg, Seattle
Staff: Mr. Harlan Knudson

MATERNAL AND CHILD WELFARE COMMITTEE—*Special Committee:*

(Appointed to staggered five-year terms by the PRESIDENT.) **PURPOSE:** Shall investigate and compile statistics on the maternal and child welfare status throughout the state, and make recommendations in this field to the Washington State Medical Association. (1938 Rev. 1955 House of Delegates).

	Term Expires
Harry A. Kettering, Seattle, **Chairman**	1967
Sheldon M. Biback, Seattle	1969
Keith Cameron, Olympia	1968
Jack M. Docter, Seattle	1971
J. Kirk Douglass, Seattle	1970
Robert G. Heskett, Spokane	1970
Franklin E. Kells, Wenatchee	1969
W. J. Kennedy, Jr., Yakima	1968
John C. Korvell, Hoquiam	1968
Daniel A. Lagozzino, Everett	1969
Frank J. LeCocq, Jr., Yakima	1969
Donald Lewis, Seattle	1969
Donald M. McIntyre, Seattle	1969
Thomas K. Oliver, Seattle	1971
H. Eugene Patterson, Yakima	1969
Paul G. Peterson, Seattle	1967
Donald C. Phillips, Wenatchee	1969
Robert F. L. Polley, Seattle	1969
Boyd C. Quint, Seattle	1971
D. W. Robinson, Spokane	1970
Mackenzie Smith, Seattle	1971

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Where Do We Go From Here?

JAMES R. KIRCHER, M.D., Burley, Idaho

As a representative of the medical profession, I was asked to be with you, because we have some mutual problems thrust upon us and every segment of our society by a benevolent and paternalistic federal government. A question which I believe each citizen must consider in all sincerity is: Who will be next to feel the direct intervention of bureaucratic tyranny between the normal relationship of one person with another?

The title of my remarks has been borrowed from a speaker I heard a few months ago. I am using this title for different reasons and with a different meaning. The speaker was Philip R. Lee, Washington, D.C., Assistant Secretary for Health and Scientific Affairs, U.S. Department of Health, Education and Welfare, who spoke before a meeting of state medical association presidents in Chicago on August 27, 1966.

Inasmuch as I am using Dr. Lee's title, I thought we could perhaps begin our thought trends properly by quoting portions of his prepared speech.

JAMES R. KIRCHER, M.D.

Dr. Lee began by reviewing the accomplishments of the past few years and said, "The record of the Johnson Administration and the 88th and 89th Congresses – is unmatched in terms of the development of creative and effective programs that will help bring better health to the American people."

I wish to submit that to blandly toss around the word "effective" in his statement is demagoguery—for if any program is to be labeled effective, it must wait upon time and history to justify the application of this adjective.

Dr. Lee, quoting from the President's message to Congress, said: "During the past three sessions, Congress has enacted 20 landmark measures in health and 19 in education; doubled the appropriations for health programs and increased the budget of our offices of education more than five fold."

Included in these "landmark measures" was winning "a 30-year-fight for a national health insurance program." Later in his speech, Dr. Lee stated, in reference to medicare, "It is obvious that this program represents the feeling of the overwhelming majority of our people that our older citizens should get high quality hospital and medical care, not as charity, but as insured patients."

Did you notice the use of the terms "health insurance" and "insured patients"? Surely I need not bore this group with the correct and proper, legitimate application of the word insurance. But do not let any consideration of the incorrect inclusion of the terms be a matter of semantics or weighing my opinion against the might of the executive branch of the United States Government. I only wish that just once the Social Security Administration would abide by the 1959 Supreme Court decision which unequivocally labeled *all Social Security* as taxes and the disbursal of funds—the so-called "benefits"—as welfare appropriations.

I can only place the use of the words "overwhelming majority" in the ash can of credibility. Almost without exception, every poll of his constituency by every congressman on either side of the political aisle previous to the enactment of the legislation in question, demonstrated a majority against medicare.

Again quoting the Assistant Secretary of HEW, "The Medicare Program has begun so smoothly and with such obvious efficiency . . .". This statement of solid opinion on August 27, 1966, just eight weeks after implementation of medicare, appears now, three months later, as ludicrous, premature or unintelligent. You may draw your own conclusion and make your own decision as to its validity. However, before you do, please consider these facts:

Dr. Kircher, president-elect of Idaho State Medical Association, delivered this speech before the Southern Idaho Life Underwriters Association, Rupert, Idaho, Dec. 5, 1966.

1. In just five months there is an acknowledged backlog of millions of dollars of unprocessed medicare claims.
2. In Ohio there is an amount of $1.2 million in claims unpaid, due to a three-way fight between the Ohio Medical Association, the Ohio State Department of Welfare, and the Social Security Administration.
3. In my office I have yet to receive any payment for services to a patient covered jointly by medicare and the State Department of Public Assistance.

I would like to quote from an Associated Press story from Washington, D.C., which appeared in a Salt Lake City newspaper recently:

"A federal health official accused newspapers and other communication media Thursday of underplaying 'fantastic successes' of the medicare program and overstressing minor failures."

Philip R. Lee, an Assistant Secretary of the Welfare Department was quoted as saying that: "Medicare is less than six-months-old, but already two million Americans have received hospital services and more than $500 million has been paid in hospital and medical bills."

I am frankly surprised and somewhat amused that the massive Health, Education and Welfare Department has to go to the press and complain about their coverage. I say this particularly in remembering all of the falsifications, half-truths and propaganda which was promulgated by this same department and others previous to the enactment of the medicare measure.

I noted that Dr. Lee seemed to stress that in less than six months medicare had provided care for over two million Americans, and that $500 million has been paid in hospital and medical bills. What he did not discuss was the number of claims that are unpaid and the millions of dollars involved that should be justly paid and are being held up by bureaucratic red tape.

In fact, his statement in the press stimulated my concern enough so that I did some checking and obtained some figures. As I have already mentioned, in Ohio there is over a million dollars in claims lying unpaid, because of a disagreement between three parties brought about by the regulations in the medicare act. I cannot help but wonder, if this is true in one state, what the figures would be nationally?

I leave speculation on this figure, which is probably astronomical, to your own mental processes.

To be more specific, I can tell you this: In the state of Idaho, with barely over 700,000 people, and an estimated 7,000 people age 65 or older, there has been a 20 per cent increase each month in the number of claims processed. In November alone more than 7,000 claims were processed by the Idaho medicare carrier. The backlog, which is comparatively small thanks to the good administration by the insurance company, is produced by three things:

1. Incomplete information from the claimant, averaging about 75 claims per day. Each of these necessitates at least a phone call from the carrier to the party concerned. The claim form is simple, but the book of information to the patient covers a considerable number of pages.

2. The necessity for the carrier to verify information through Social Security. This requires an average of 150 to 175 inquiries per day.

3. The problem of deceased beneficiaries. This problem must be corrected soon. It is caused by a requirement in the law that the claim form must be signed by the beneficiary, even if it happens to be a person in a coma or one who died before anyone could put pen or pencil in his hand. At present there are 350 such claims representing 75 patients. (Editor's note: Since this speech was presented, the Department of Health, Education and Welfare has announced a simplified procedure that will make it unnecessary to appoint a legal representative of a beneficiary's estate simply to collect a medicare payment.)

I have given some facts on Idaho. I have quoted an overall figures in Ohio, and I can give you one other figure: In Los Angeles, there are, at present, an estimated 12,000 unpaid claims in the backlog, because someone feels they require review by a medical society or some representative medical organization before payment. So what Dr. Lee quoted a few days ago is true, but as is so often the case, it is only part of the truth.

The tiger was officially let out of its cage when Dr. Lee noted "As important as medicare will be the impact of Title XIX may be even greater." I presume you are aware that the cage was barely open before Congress belatedly realized the animal was gorging itself at the federal treasury, and immediate action was necessary.

The plan of the state of New York, as originally submitted, designated a family of four with a net income of $6,000 as medically indigent—and some help would be available even to those families with incomes up to $10,000. New York's proposed program would use up the total amount budgeted for the entire nation for one year.

Are you aware that the official estimate for the first fiscal year for Idaho's Title XIX program is $9.14 million? Of this the federal funds (taxes) are $6,400,000 and Idaho Government taxes (funds) are $2,740,000. The Title XIX programs include five different programs—Old Age Assistance, Aid to Dependent Children, Aid to the Blind, Aid to the Permanently Totally Disabled, and Medical Assistance for the Aged—a total of about 9,750 cases out of our population of 700,000 plus.

Under the heading "Special Programs", Dr. Lee's statements include: "Health is likewise involved in a number of special programs which are now in operation or are proposed for implementation. It is clearly involved in many of our foreign aid activities, and in the food for freedom program. It is involved in the proposed demonstration cities and metropolitan developments act of 1966. It is involved in the proposed International Health and Education Acts."

Just a little later in his speech in remarking on "the unmet needs", Dr. Lee stated, "I have had an opportunity today to mention only some of the more important legislative steps taken during the past three years to improve the health of Americans . . ."

I wonder what some of the other programs and proposals are in light of the present multitude of federally supported programs that affect the delivery of health services in this country—for the Department of Health, Education and Welfare has recently published a 96-page-booklet to describe all the present programs.

Well, such were the 33 elucidating pages of text presented to the officers of the state medical associations by a representative of the "Puzzle Palace on the Potomac." Personally, I could not find any realistic answers, or any that would be acceptable in the concept of the American ideal and principle of individual freedom, as the means to progress.

For me the question still remains: Where do we go from here? ■

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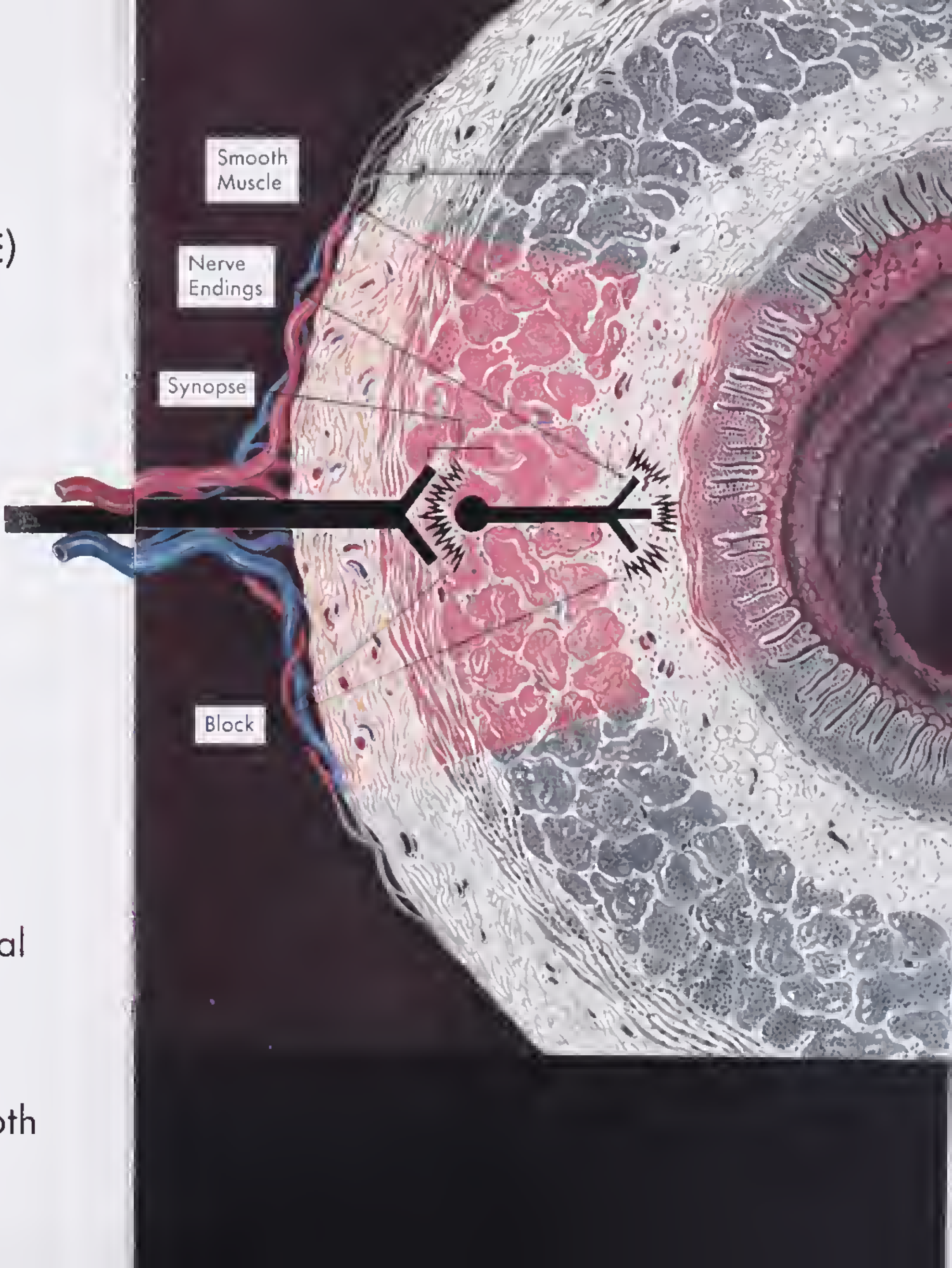
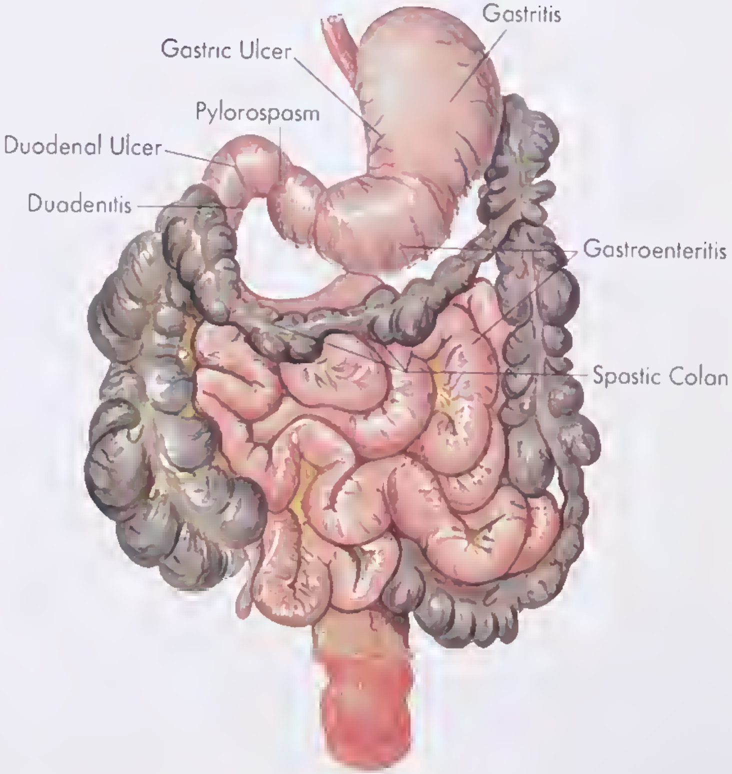


TREST (methixene hydrochloride) directly antagonizes the parasympathetic nervous system.

TREST (methixene hydrochloride) blocks the action of acetylcholine formed at the synapses and visceral parasympathetic nerve endings.

Therefore, nerve impulses are prevented from reaching the smooth muscle layer.

TREST® (METHIXENE HYDROCHLORIDE) relieves gastrointestinal spasm, hyperactivity and associated pain in:



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(METHIXENE HYDROCHLORIDE)
# works.

EFFECTIVENESS AND SAFETY
t.i.d. dosage in milligrams

1 mg. symptomatic relief

2 mg. upper recommended clinical dose/greater pharmacologic activity and symptomatic relief/side effects uncommon

10 mg.

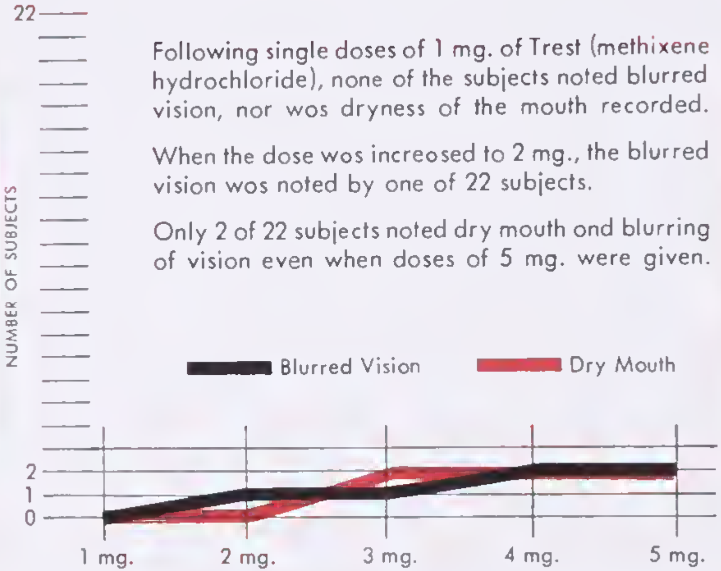
Studies with 372 subjects revealed no adverse effect upon vital organs when dosage was increased 10 times the normally effective dose of 1 mg. t.i.d. for periods up to 2½ years of continued administration.

LACK OF SIDE EFFECTS

Following single doses of 1 mg. of Trest (methixene hydrochloride), none of the subjects noted blurred vision, nor was dryness of the mouth recorded.

When the dose was increased to 2 mg., the blurred vision was noted by one of 22 subjects.

Only 2 of 22 subjects noted dry mouth and blurring of vision even when doses of 5 mg. were given.



Conclusion: Typical atropine-like side effects are not expected when Trest is used 1 mg. t.i.d. These effects are uncommon when the dosage is increased to 2 mg. t.i.d.

"A highly satisfactory symptomatic response was obtained in 20 of the 23 patients who took 1 mg. of methixene hydrochloride (Trest) by mouth three times daily. No side effects occurred at this dosage during administration of the medication itself.

"Methixene hydrochloride (Trest) provides highly gratifying symptomatic relief in a variety of conditions associated with gastrointestinal motility without producing the usual atropine-like side effects and without requiring concurrent barbiturate sedation."

—Martins, J. K.:
Clin. Med. 72:1313-1316
(Aug.) 1965.

"... in a series of 47 patients suffering from various types of functional bowel distress. The superiority of this drug (Trest) in dosage of 1.0 mg. three times daily by mouth over the placebo is statistically significant. At that dosage level, side effects were not observed."

—Hufford, A. R.:
Clin. Med. 72:1151-1155
(July) 1965.

The full ¼ grain of phenobarb in the formula
takes the nervous edge off the pain
...helps bring out the best in codeine

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the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.)	16.2 mg.
(Warning: may be habit forming)	
Aspirin (2½ gr.)	162.0 mg.
Phenacetin (3 gr.)	194.0 mg.
Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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continued from page 90

Paul W. Sweet, Centralia	1968
Eugene H. Wyborney, Medical Lake	1968

Staff: Mr. Harlan R. Knudson

MEDICAL ASPECTS OF SPORTS—Special Committee:

Not less than nine (9) members appointed by the PRESIDENT for staggered three-year terms. A member to serve as a liaison member on the School Health Committee. **PURPOSE:** Shall generally follow the purposes and programs of the AMA's Committee of the same name. (A more formal purpose to be developed for presentation to the House of Delegates in 1967 at which time the Committee will be considered for Standing Committee status.)

	Term Expires
Harry H. Kretzler, Jr., Seattle, **Chairman**	1969
*Orvis A. Harrelson, Tacoma	1969
T. R. Ingham, Olympia	1968
Walter J. Kennedy Jr., Yakima	1968
James D. Layman, Seattle	1968
O. Charles Olson, Spokane	1967
Erwin R. Slade, Snohomish	1969
Vaughn Smith, Wenatchee	1967
(open)	1967

Staff: Mr. George W. Morford

*Dr. Harrelson liaison member with School Health Committee.

MEDICAL DEFENSE COMMITTEE—Standing Committee:

(A minimum of seven (7) members, no more than two from the same Congressional District, ((and the Secretary-Treasurer)), elected for three-year staggered terms by the BOARD OF TRUSTEES.) **PURPOSE:** Shall investigate all reported claims against members of this Association for compensation for injuries alleged to have resulted from malpractice; shall determine, as nearly as may be practicable, the circumstances leading up to the making of the claim itself and the grounds on which the claim is based. If the Committee believes a claim unjust, it shall cooperate, so far as it can lawfully do so, with the member against whom the claim has been made and with his counsel. If the Committee believes that a claim is a just claim, it shall cooperate with the member against whom the claim is made and his counsel, so far as it can lawfully do so, in effecting an equitable settlement. (1913 Rev. 1956 House of Delegates; Rev. 1960 House of Delegates; Rev. 1965 House of Delegates).

District		Term Expires
1	Donald T. Hall, Seattle, **Chairman**	1967
4	Frederick L. Burrows, Yakima	1967
7	Richard O. Diefendorf, Bremerton	1967
3	William H. Hardy, Aberdeen	1967
2	Walter C. Moren, Bellingham	1967
5	Robert P. Parker, Spokane	1967
4	Morton W. Tompkins, Walla Walla	1967
6	Stanley W. Tuell, Tacoma	1967
	Carl E. Mudge, Seattle (Secy-Treas.)	1969

Staff: Mr. George W. Morford

MEDICAL ECONOMICS COMMITTEE—Standing Committee:

(Three (3) members appointed by the BOARD OF TRUSTEES to serve three-year staggered terms.) **PURPOSE:** Shall study and investigate, so far as it and the Board of Trustees may deem practicable or advisable, such phases of general economics as have a bearing on the practice of medicine. (1941. Reactivated 1956 House of Delegates).

	Term Expires
Paul R. Lauer, Everett, **Chairman**	1967
J. William Bowen, Jr., Tacoma	1969
Charles D. Muller, Bremerton	1968

Staff: Mr. Richard F. Gorman

MEDICAL SCHOOL, TEACHING & RESEARCH HOSPITAL COMMITTEE—Standing Committee:

(Members appointed annually by the PRESIDENT.) **PURPOSE:** Shall provide permanent liaison between the Medical School Administration and the W.S.M.A.; shall maintain the principles and policies, as explained in the two Resolutions regarding the Medical School Hospital, adopted by the 1955 House of Delegates, and as they may be modified or changed by the House of Delegates in the future; shall devise procedures and methods necessary for the implementation of these policies. (Rev. 1965 House of Delegates) ((1957 House of Delegates recommends the Committee develop close liaison between the Medical School and make recommendations to the W.S.M.A. as to attitudes and help to the School in its relation with the State Legislature.))

Robert B. Bright, Bremerton, **Chairman**
Leeon F. Aller, Jr., Snohomish
Kirk J. Anderson, Seattle
Chadwick F. Baxter, Spokane
Raymond J. Clark, Seattle
William H. Frazier, Spokane
Richard C. Greenleaf, Seattle
Donald T. Hall, Seattle
John N. Lein, Redmond
Frederic C. Moll, Seattle
Ralph F. Nuzum, Yakima
Robert G. Petersdorf, Seattle
J. Walfred Wallen, Burlington
Wilbur E. Watson, Seattle
John L. Wright, Seattle
Staff: Mr. George W. Morford

MEDICINE AND RELIGION COMMITTEE—Special Committee:

(Members appointed annually by the PRESIDENT.) **PURPOSE:** Shall study the relationship of physicians and clergymen and plan meetings that will accomplish the objective of bringing members of the two professions together to discuss their common problems in the total treatment and care of patients. (1963 Board of Trustees).

Arch H. Logan, Jr., Spokane, **Chairman**
Robert H. Barnes, Seattle
Charles E. Buck, Longview
Edwin B. Chase, Everett
Arthur H. Grauman, Seattle
John F. Harrington, Yakima
S. Harvard Kaufman, Seattle
Thomas B. Smart, Seattle
Staff: None Assigned

MENTAL HEALTH COMMITTEE—Standing Committee:

(Not less than nine (9) members appointed by the PRESIDENT to serve three-year staggered terms. Members to be from the fields of surgery, internal medicine, pediatrics, public health, general practice, psychiatry and other specialties as may be deemed appropriate. The Chairman to be a psychiatrist.) **PURPOSE:** To study problems in connection with the State Mental Institutions and all matters of mental health pertinent to the practice of medicine. (1956 House of Delegates).

	Term Expires
Hugo Van Dooren, Tacoma, **Chairman**	1967
George H. Allison, Seattle	1967

Arthur B. Craig, Spokane	1968
Edward A. Hamacher, Spokane	1968
Roger C. Hendricks, Seattle	1968
Harry D. Hunter, Wenatchee	1969
Charles Kaplan, Seattle	1969
Daniel R. Kohli, Seattle	1969
Howard Krouse, Seattle	1969
Walter E. Puddy, Spokane	1967
David W. Rabak, Seattle	1969
Marcus R. Stuen, Tacoma	1969
G. Charles Sutch, Richland	1968
Robert A. Wetzler, Spokane	1968
Adolph Whiting, Seattle	1969

Staff: Mr. Harlan R. Knudson

NEOPLASTIC COMMITTEE—Special Committee:

(Not less than three (3) members, appointed by the PRESIDENT, who also serve on the Cancer Coordinating Committee of the State of Washington.) **PURPOSE:** Shall report annually to the House of Delegates on the activities of the Cancer Coordinating Committee, and other Neoplastic subject-matter. (1921 Rev. 1965 House of Delegates.)

	Term Expires
James W. Devney, Ellensburg, **Chairman**	1968
Thomas Carlile, Seattle	1967
Robert C. Coe, Seattle	1967
David Metheny, Seattle	1967

Staff: Mr. George W. Morford and Mr. Dennis Erickson

OCCUPATIONAL HEALTH—Standing Committee:

(Six (6) members appointed by the BOARD OF TRUSTEES to serve three-year staggered terms.) **PURPOSE:** Shall promote high professional and administrative standards of occupational health in the State of Washington; shall cooperate with the AMA Council on Occupational Health. (Formerly Industrial Health—1961 House of Delegates).

	Term Expires
P. A. Fuqua, Richland, **Chairman**	1969
Warren E. Bergholz, Bellingham	1967
Aubrey Carter, Everett	1969
Richard C. Miller, Spokane	1967
William D. Norwood, Richland	1968
Sherman S. Pinto, Tacoma	1968

Staff: Mr. Harlan R. Knudson

PREPAID MEDICAL CARE COMMITTEE—Standing Committee:

(Nine (9) members elected by the BOARD OF TRUSTEES; not more than four (4) members to be members or past members of the Washington Physicians Service Board of Trustees, to be elected for a one-year term; five (5) members to be elected for staggered three-year terms.) **PURPOSE:** Shall assess and report the problems and successes of the doctor-sponsored or doctor-administered medical care plans in the State of Washington as they pertain to presently accepted philosophy and to recommend future changes and requirements. (1962 House of Delegates).

	Term Expires
*Wayne W. Zimmerman, Tacoma, **Chairman**	1967
*Paul R. Lauer, Everett	1967
William H. Myers, Everett	1967
*Dennis H. Seacat, Vancouver	1967
Richard A. Stiles, Yakima	1968
Charles C. Strong, Vancouver	1967
Donald C. Tanner, Bellevue	1968
*Harold L. Tracy, Moses Lake	1967
William E. Watts, Seattle	1969

*Indicates members or past members of WPS Board of Trustees.

Staff: Mr. Harlan R. Knudson

PROFESSIONAL AND HOSPITAL RELATIONS COMMITTEE—Standing Committee:

(Seven (7) members appointed annually by the BOARD OF TRUSTEES.) **PURPOSE:** Shall study problems arising from institutional practice, in addition to other common professional relationships; shall study problems presented by the practice of medicine in hospitals. (1944 Rev. 1956 House of Delegates: 1957 Board of Trustees designated number of members.)

	Specialty
G. Marshall Whitacre, Tacoma, **Chairman**	Internal Medicine
Ian C. Napier, Spokane	Anesthesiology
Duncan Robertson, Seattle	G.P.
H. Harlow Skinner, Jr., Yakima	Surgeon
George A. Tanbara, Tacoma	Pediatrician
M. Marvin Wallace, Bellevue	Radiologist
J. L. Whitaker, Bremerton	Pathologist

Staff: Mr. Richard F. Gorman

PUBLICATION COMMITTEE—Standing Committee:

(Three (3) members elected by the BOARD OF TRUSTEES for three-year staggered terms.) **PURPOSE:** Shall be deemed the nominees of this Association as the Trustees for the Northwest Medical Publishing Association. (1949 House of Delegates Rev. 1960 House of Delegates) ((Rev. 1965 House of Delegates — To provide liaison between the WSMA and the Northwest Medical Publishing Association.))

	Term Expires
John R. Hahn, Arlington, **Chairman**	1967
Charles R. Cavanagh, Jr., Spokane	1968
Robert W. Hoffman, Seattle	1969

Staff: None Assigned

PUBLIC LAWS COMMITTEE—Standing Committee:

(Consists of the President, the Chairman of the Committee on Public Relations, and three (3) members elected by the BOARD OF TRUSTEES to serve three-year staggered terms.) (Board of Trustees designates Chairman.) **PURPOSE:** Shall keep informed with respect to laws, court decisions, court proceedings, administrative rules, proposed and pending legislation relating to public health, and such other matters as relate to the objectives of this Association.

	Term Expires
Robert B. Hunter, Sedro Woolley, **Chairman**	1967
Frank C. Henry, Seattle	1968
Lucius D. Hill, Seattle	1967
Robert L. Reeves, Seattle	1969
Donal R. Sparkman, Seattle	1968

Staff: Mr. Harlan R. Knudson

PUBLIC RELATIONS COMMITTEE—Standing Committee:

(Nine (9) members appointed by the BOARD OF TRUSTEES to serve three-year staggered terms.) (Board of Trustees will designate the Chairman.) **PURPOSE:** The Board of Trustees shall define the duties and direct the activities of the Public Relations Committee. (1938 Rev. 1955 House of Delegates; Rev. 1960 House of Delegates).

	Term Expires
Frank C. Henry, Seattle **Chairman**	1968
R. M. Allman, Port Angeles	1967
Arnold J. Herrmann, Tacoma	1967
A. J. Katsman, Seattle	1969

continued on page 108

Now, now, Mrs. Forsythe, we've never lost a cold patient yet.

When she's experiencing acute discomfort from cold symptoms, it's small wonder the patient becomes distressed about her condition.

She will breathe easier when you prescribe Novahistine LP.

Novahistine LP is a long-acting decongestant that helps restore normal mucus secretion and ciliary activity—physiologic mechanisms which prevent infection of the respiratory tract. A dose of two tablets taken in the morning and repeated in the evening will usually keep air passages clear for 24 hours.

Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution patients who operate machinery or motor vehicles that drowsiness may result.

Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

NOVAHISTINE® LP

For relief of nasal congestion.

continued from page 105

John G. Rotchford, Spokane	1968
J. F. Vaughan, Vancouver	1967
Harry E. Worley, Mount Vernon	1969
W. B. Zook, Wenatchee	1968

Staff: Mr. Richard F. Gorman

QUACKERY AND HARMFUL ACTS COMMITTEE—Special Committee

(Five (5) or more members appointed by the PRESIDENT.) **PURPOSE:** Shall investigate claimed harmful results following acts by practitioners of the healing arts in this state who are not licensed physicians and surgeons, and recommend ways and means by which they may be controlled and/or eliminated. (1963 House of Delegates).

	Specialty
Harry E. Worley, Mt. Vernon, **Chairman**	G.P.
John L. Carney, Seattle	E.N.T.
C. I. Hood, Yakima	Psychiatry
Richard Kleaveland, Spokane	Surgery
J. Garth Mooney, Seattle	Orthopedics
Matthew A. Pilling, Seattle	Plastic Surgery
Neil F. Thorlakson, Seattle	Ophthalmology
Robert E. Waud, Bellingham	Radiology

Staff: Mr. Harlan R. Knudson

REHABILITATION PROGRAMS COMMITTEE—Special Committee:

(Seven (7) members recommended by the BOARD OF TRUSTEES and approved by the State Board of Vocational Rehabilitation to serve three-year staggered terms. Members to represent physical medicine, orthopedics, internal medicine, general practice, surgery and some sub-specialties, such as ophthalmology, dermatology, etc.) **PURPOSE:** Shall review any problems relating to rehabilitation and act as a Medical Advisory Committee for the Division of Vocational Rehabilitation of the State of Washington; shall act as the Medical Advisory Committee to the O.A.S.I. District offices in the implementation of Public Law 880 as recommended by the AMA House of Delegates. (1956 House of Delegates; Rev. 1957 Board of Trustees Rev. 1961 House of Delegates; Rev. 1963 House of Delegates).

	Term Expires
Sherburne W. Heath, Jr., Seattle **Chairman**	1969
Robert V. Erickson, Seattle	1969
Robert W. Florence, Tacoma	1968
George W. Girvin, Spokane	1967
Buell C. Kingsley, Bellingham	1967
George R. Kunz, Tacoma	1969
W. B. Richardson, Bremerton	1967

Robert H. Leahy, Olympia, Department of Vocational Rehabilitation Consultant
Donal R. Sparkman, Seattle, Regional Program Consultant
Staff: Mr. Harlan R. Knudson

RELATIVE VALUE FEE STUDY, COMMITTEE ON—Special Committee:

(Appointed by the PRESIDENT at the request of the Board of Trustees.) **PURPOSE:** Shall study and report on the Relative Value Study at the direction of the Board of Trustees. (1962 House of Delegates; Rev. 1964 House of Delegates).

Robert F. L. Polley, Seattle, **Chairman**
H. Clark Hoffman, Seattle
Jack B. Thomas, Seattle
Staff: Mr. Harlan R. Knudson

REVISION OF CONSTITUTION AND BYLAWS COMMITTEE—Special Committee:

(Appointed by the EXECUTIVE COMMITTEE.) **PURPOSE:** Shall study proposed revisions of the Constitution and By-Laws. (1947 Board of Trustees).

Staff: Mr. Richard F. Gorman

RURAL HEALTH COMMITTEE—Special Committee:

(Appointed annually by the PRESIDENT.) **PURPOSE:** Shall encourage the setting up of rural health councils; shall maintain liaison and promote medical public relation with various farm organizations and groups; shall work with the AMA Council on Rural Health. (1949 Rev. 1957 House of Delegates.)

Arnold C. Tait, Sunnyside, **Chairman**
G. Dean Barth, Garfield
Donald H. Boettner, Bellingham
Glenn P. Bramwell, Bremerton
Louis S. Dewey, Richland
Marshall W. Thompson, Davenport
Staff: Mr. George W. Morford and Mr. Dennis Erickson

SCHOOL HEALTH COMMITTEE—Standing Committee:

(Nine (9) members appointed by the PRESIDENT to serve three-year staggered terms.) **PURPOSE:** Shall investigate and study public school health activities and report to the Board of Trustees with recommendations; shall urge each county medical society to form a committee on School Health to work with local school districts; shall act in an advisory capacity to the component society committees, and to state agencies interested in the problems of school health. (Rev. 1957; Rev. 1964 House of Delegates.)

	Term Expires
Clark W. Biedel, Bremerton, **Chairman**	1967
Carl A. Brakel, Spokane	1968
William J. Henry, Twisp	1968
Richard B. Jarvis, Seattle	1969
Harry H. Kretzler, Jr., Seattle	1969
Daniel A. Lagozzino, Everett	1969
Darell H. Larson, Moses Lake	1967
Donald L. McGuinness, Yakima	1967
Jesse Q. Sewell, Harrington	1968

Staff: Mr. George W. Morford and Mr. Dennis Erickson

SCIENTIFIC WORK COMMITTEE—Standing Committee:

(Consists of President as Chairman; Executive Committee Chairman, and three (3) members elected by the BOARD OF TRUSTEES to serve three-year staggered terms; one member elected annually.) (One member to be from the County Society where the Association's Annual Meeting will be held.) **PURPOSE:** Shall prepare the program for the Annual Meeting and also the scientific exhibits; shall be the editing agent of the Association and shall arrange, if ordered by the House of Delegates, for the proper publication of the transactions of the Association in its official organ. It may delegate its power as it sees fit. (1931)

	Term Expires
Lucius D. Hill, Seattle, **Chairman**	1967
Arthur B. Craig, Spokane	1967
Carl P. Schlicke, Spokane	1967
Robert W. Simpson, Seattle	1969
Alvin J. Thompson, Seattle	1968

Staff: Mr. George W. Morford

STATE DEPARTMENT OF HEALTH (Advisory) COMMITTEE—Standing Committee:

(Not less than five (5) members appointed annually by the PRESIDENT.) Committee may appoint from among the membership of the Association such number of subcommittees so constituted as it deems proper to work under its direction and control in such fields of public health as it may determine. **PURPOSE:** Shall keep in touch with and investigate matters concerned with the public health of the state; shall carry on such activities in the field of public health and aid in the dissemination of public health information in relation thereto as the Board of Trustees may direct. 1956 House of Delegates recommends the Committee hold quarterly meetings. 1957 House of Delegates recommends that continuity of service be considered in appointing this Committee. (1944 House of Delegates.)

(Chairman of Maternal & Child Welfare Committee authorized to be a member (1958 Board of Trustees.)

C. Wight Reade, Olympia, **Chairman**
William Anderson, Spokane
Harry A. Kettering, Seattle
Donovan O. Kraabel, Seattle
Herman J. Schroeder, Seattle
Asa Seeds, Vancouver
Orliss Wildermuth, Seattle

Staff: Mr. Harlan R. Knudson

STATE DEPARTMENT OF PUBLIC ASSISTANCE (Advisory) COMMITTEE—Special Committee:

(Nine (9) members appointed annually by the PRESIDENT.) **PURPOSE:** Shall serve as a liaison between the Department of Public Assistance and the Washington State Medical Association; shall deal in an advisory capacity with medically-related problems arising in the administration of the Department of Public Assistance. (1955 Board of Trusttes), 1963 House of Delegates; 1964 House of Delegates instructed Committee to hold at least one meeting annually with the Department of Public Assistance to explore mutual problems.)

Waldo O. Mills, Seattle, **Chairman**
James E. Cantrell, Seattle
Jack Gustafson, Yakima
Arnold J. Herrmann, Tacoma
Harold T. Pederson, Spokane
Robert F. L. Polley, Seattle
Robert Rood, Bellingham
Harold L. Tracy, Moses Lake
Robert P. Hall, Olympia, Department of Public Assistance Consultant
Staff: Mr. Harlan R. Knudson

VEHICLE SAFETY COMMITTEE—Special Committee:

(Seven (7) members appointed by the PRESIDENT.) **PURPOSE:** To work with the State Department of Motor Vehicles in an advisory capacity, in evaluating and up-grading its Medical Restriction program.

Herbert L. Hartley, Seattle, **Chairman**
Gilbert G. Eade, Seattle
Philip A. Peter, Seattle
A. W. Stevenson, Yakima
Arthur A. Ward, Seattle
Joseph H. Gill, Vancouver
Edward N. Hamacher, Spokane
Staff: Mr. Harlan R. Knudson

DELEGATES AND REPRESENTATIVES OF WSMA TO ALLIED ORGANIZATIONS

WASHINGTON STATE CANCER COORDINATING COMMITTEE:

W.S.M.A. Members	Term Expires
David Metheny, Seattle, **Chairman**	1967
Thomas Carlile, Seattle	1967
Robert C. Coe, Seattle	1967
James W. Devney, Ellensburg	1968

PHYSICIANS' EYE ADVISORY COMMITTEE— (Department of Public Assistance):

PURPOSE: To provide recommendations for eye care to the administrative staff of Services for the Blind, Department of Public Assistance.

All terms expire December 31 of year listed.

Robert J. Davis, Spokane	1966
George H. Drumheller, Everett	1967
John H. Hodge, Bellingham	1969
Robert W. Mather, Yakima	1968
R. Hugh Minor, Everett	1969
Philip A. Peter, Seattle	1967
Milton G. Radewan, Wenatchee	1968
Neil F. Thorlakson, Seattle	1966

COMMITTEES DISCONTINUED, ABOLISHED OR SUPERCEDED

Automobile Traffic Accident Committee
  1958 President
Convention Committee
  1962 House of Delegates "To be reconstituted upon request."
Coroner's System Committee
  1955 House of Delegates
Diabetes Committee
  1955 House of Delegates
Hospitals, Special Committee On
  Combined with Professional and Hospital Relations Committee—1955 Board of Trustees
Industrial Health Committee
  1961 House of Delegates (See Occupational Health Committee)
Ionizing Radiation Hazard Control Committee
  1962 House of Delegates (Duties delegated to the State Department of Health ((Advisory)) Committee)
Joint Commission for the Improvement and Care of the Patient
Medical Disciplinary Act Committee
  1955 House of Delegates "To be reconstituted upon request."
Medical Care, Study of
  1954 Board of Trustees: "W.P.S. President to submit annual reports to the WSMA Board."
Mental Hygiene Committee
  See Mental Health Committee
Nine, Committee of
  See Joint Commission for the Improvement of the Care of the Patient. (Discontinued)
Nursing Care, State Polio Planning
  1955 House of Delegates
Nursing Education, Advisory Committee on
  1953 House of Delegates "Duties delegated to Committee of Nine."
Resolutions and Reports Activating
  1956 House of Delegates
Staphylococcal Committee
  1962 House of Delegates
Tuberculosis Committee
  1955 House of Delegates
Veterans' Medical Care, Special Committee
  1955 Board of Trustee "Functions to be continued by AMA Delegates." Reactivated 1957 House of Delegates. Discontinued 1962 House of Delegates.
Washington Physicians Service Liaison Committee
  1962 House of Deleagtes, see Prepaid Medical Care Committee
Washington State Health Council, Delegate and Alternate
  1963 by action of Health Council

Shadel Hospital

12001 Ambaum Boulevard, S.W.
Seattle, Washington 98146
CH 4-8100

The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

APPROVED BY THE AMERICAN MEDICAL ASSOCIATION   MEMBER OF THE AMERICAN HOSPITAL ASSOCIATION

Conclusion of Report of the House of Delegates
Washington State Medical Association

State Association Dues Increase Approved Unanimously

An increase of $35 in annual state association dues was approved by the unanimous vote of the WSMA House of Delegates in Spokane, September 21, 1966.

Prior to the annual meeting, all members had received a newsletter explaining the proposed 4-pronged program, including the organization of a Foundation, and members were requested to advise delegates of their opinions on the subject.

The following reports are some of the many studied by delegates in arriving at their unanimous vote to adopt the 4-Pronged Program and to increase the dues to implement it.

Reference Committee hearings on these reports were packed with members who questioned and discussed the activities reported. Consensus was for approval to move ahead.

The reports listed and published below were some of the many which were carefully considered and thoroughly discussed:

1. Dues increase
2. Report of Finance Committee
3. Formation of a Foundation
4. New program on industrial insurance
5. Heart, Cancer and Stroke Program
6. Title XVIII of Public Law 89-97 (Medicare)
7. Title XIX of Public Law 89-97 (Medicare)

Special Reports of the Executive Committee

Each Delegate has been issued a manila folder that contains historical and current financial statements and explanatory data used by the Board of Trustees last January in approving the annual budget for the calendar year 1966.

During the past six years, your Executive Committee, Finance Committee, Board of Trustees, and this House of Delegates have discussed the trend toward increasing activities on the part of the Association. Each year they have approved increased annual budgets with the result that we now face a critical decision. This is basically a policy decision on the general direction the Association should take.

In view of this financial picture, we now must move in one of two ways: (1) we increase the dues by $35 per year and move ahead with the Foundation and other programs, or; (2) we do not increase dues and, immediately following this meeting, we change the emphasis of Association activities to one of reaction to developments in the best way we can rather than our current emphasis on taking the initiative.

To the question—Isn't there a middle ground?—we must answer in the negative and refer you to the financial history of the past six years, and to the following.

Your Board of Trustees, and especially your Executive Committee, represent "the place beyond which the 'buck' cannot be passed." It is up to them to act or not act on literally hundreds of important requests and demands made by our members and our Committees. It likewise is our responsibility to respond to changes currently taking place, and to anticipate and plan for the medical profession's role in future changes.

The Executive Committee, Finance Committee, Board of Trustees and Reference Committees of this House have carefully studied annual budgets and have satisfied themselves that Association funds are being expended with a strong emphasis on economy of operation. The problem we face in the matter of a dues increase is one of policy rather than of operations.

If busy physicians are to involve themselves in matters of importance to themselves, their patients and their future patients, they are going to have to do it through their professional organizations.

Most physicians are heavily engaged in taking care of sick people. For a variety of reasons, many physicians do not participate in the common organization task. This leaves the job to be done by those physicians who are willing, or who get "mouse-trapped" into taking the time to work on our common problems. Those who do become active (about 500 men in our Association) quickly find that they also have patients to care for so they turn to staff for vital work in preparation, execution and follow-up of their efforts.

All operations . . . all programs . . . all activities of any association cost money. The only way you can eliminate costs is to do nothing. And even this costs something because you have to have an organization and hold meetings to decide to do nothing.

4 pronged program

Your attention now is called to the material on the blue-colored sheet entitled, "New 4-Pronged Program Outlined" (mailed to all WSMA members prior to the Annual Meeting). Emphasis has been placed on the inter-dependency and mutually supportive aspects of the 4-Pronged Program. Concrete examples abound. Let us look at one that is typical of many others, school health. Here is an area of activity that brings physicians into close working relationships with educators at all grade and administrative levels.

school health

Between January 1, 1966 and August 25, 1966, forty physicians from all parts of the state, and a like numbers of educators met at thirty-one work meetings to write basic school health policy for the state's school systems. This work originated at Association-sponsored statewide Conferences of Physicians and Schools. As a result of these activities, school health policies, for the first time, are being written jointly by educators and physicians. Our School Health Committee for many years viewed with alarm the lack of medical guidance in school health policies. Now that much-discussed guidance is a reality. But there is quite a difference in cost between viewing with alarm and getting the job done.

This activity, and twenty other similar Association efforts in other fields, are producing results. Continuation of this School Health Committee action, including constant follow-up, will have a most favorable and lasting effect on school health policies within our schools, with favorable side effects on parent-school relationships. The medical profession's position has been strengthened relative to such school-related programs as Operation Head Start and Economic Opportunity projects.

Educating the educators on the realities of school children's health care has been another gain produced by this work. The doctor's office has become the accepted headquarters for the health care of school children.

These School Health Committee activities have improved relationships between physicians and educators to the point where the strong education lobby now is acutely aware, for the first time, of the desirability of maintaining maximum private financing of health care, thus avoiding a large new competitor for public funds.

All physicians have benefited from these efforts as committee and subcommittee activities have compelled educators to recognize the medical profession's high degree of interest and competence.

Thus, we see School Health Committee programs resulting in: (1) Realistic and medically correct physical examinations in the private physician's office; (2) educators' awareness of physician's interest in the health and welfare of school children; (3) educators' awareness of their shortcomings in the health field—a fact that did not occur to them prior to confrontation with knowledgeable and interested physicians in joint work sessions; (4) educators' awareness of the desirability of avoiding extensive public financing of health care services.

The sample multiple benefits are being derived from the activities of committees in such "public service" areas as communicable diseases; PKU testing, adopted children, sexual psychopaths and delinquents, retarded children, the mentally ill, the aged, health frauds and quackery, sudden deaths of infants, auto and driver safety, medicine and religion, civil disaster, and rural health.

When all of the segments of the public interested in these activities are put together, we find we are receiving increasing support among the vast majority of the groups that make up our state's population. The favorable cumulative effect of this support is considerable when brought to bear on public opinion and on legislation related to our goals.

cost factor

But we cannot ignore the fact that there is a cost factor that must be attached to each one of these gains. The successful three-year efforts of the School Health Committee entailed communications, staff time, and conference costs of nearly $10,000. (This includes no compensation or expenses for Committee members, except for an occasional meal, nor are they asking for any.) Without this expenditure, our School Health Committee would still be meeting for an hour or two, two or three times a year, and bemoaning the trend towards educators' intervention in the health and medical care of school children.

Your House of Delegates book is filled with reports of these types of activities. There is no doubt that these efforts are being integrated into our total program and supportive of our goals. For example: no one could mistake the more favorable climate which enabled the Industrial Insurance Committee to obtain an additional $1,000,000 per year to provide quality medical care to injured workmen. Nor can anyone who studies the situation doubt that our successful efforts in other government and legislative areas have benefited greatly from these purposeful activities.

Your Executive Committee strongly concurs with the opinion of the Finance Committee that there is no practical middle ground: we should either move ahead with a $35 dues increase; or we should not increase dues and begin immediately to decrease many of our current activities, particularly those in public service and government relations areas.

IDAHO

Idaho State Medical Association—360 SONNA BUILDING, Boise, Idaho 83702

PRESIDENT	*A. Curtis Jones, Jr., M.D., Boise*
SECRETARY	*William R. Tregoning, M.D., Boise*
EXECUTIVE SECRETARY	*Mr. Armand L. Bird, Boise*

annual meeting, June 28-July 1, 1967, Sun Valley

A. CURTIS JONES, JR., M.D.

President, Idaho State Medical Association

place and date of birth

Butte, Montana, April 5, 1916

education and training

Graduate Shattuck Military School, Faribault, Minnesota

B.S. Degree—University of Washington, Seattle, 1938

M.A. Degree—University of Michigan, Ann Arbor, 1939

M.D. Degree—University of Michigan Medical School, 1943

Internship—University of Michigan Hospital, 1943-44.

Assistant Residency in Otolaryngology—University of Michigan Hospital, 1943-44

Residency in Otolaryngology, University of Michigan Hospital, 1944-45

Instructor in Otolaryngology—University of Michigan Medical School, 1947-48

certification

American Board of Otolaryngology, 1948

Professional association, Jones Clinic, Boise

hospital affiliation

St. Luke's Hospital, active staff (Chief of Staff, 1960); St. Alphonsus Hospital, Malheur County Hospital, Nyssa, Oregon, consulting staff.

membership in medical societies

Ada County Medical Society

Idaho State Medical Association

Fellow of the American College of Surgeons (Past President, Boise Valley Chapter)

Pacific Coast Oto-Ophthalmological Society

American Academy of Ophthalmology and Otolaryngology

American Cleft Palate Association

membership in lay organizations

St. Michaels Episcopal Church

Boise Elks Lodge

Rotary Club of Boise

Hillcrest Country Club

Arid Club

World War II Service

Captain, U.S. Army Medical Corps Aural Rehabilitation Section, 1945-47

Dr. Holdren Named to Board

Mary L. Holdren, Boise, has been named to the Boise Independent School District Board of Trustees. She will serve until 1968 to complete the term of a board member who resigned.

Dr. Holdren received her M. D. degreee in 1951 from Tulane University, New Orleans.

A specialist in obstetrics-gynecology, she served her internship and first year residency at Women's and Children's Hospital, San Francisco, and completed her residency at Gorgas Hospital, Canal Zone.

She practices with her husband, Robert F. Holdren, a thoracic and cardiovascular surgeon, in Boise. They have a son and a daughter.

Dr. Holdren is chairman of the department of obstetrics and gynecology at St. Alphonsus Hospital and a member of the Booth Memorial Hospital Advisory Board.

Dr. Jones WICHE Commissioner

Martha D. Jones, Boise, has been appointed by Gov. Robert E. Smylie to succeed Alfred M. Popma, as an Idaho Commissioner for the Western Commission for Higher Education.

A graduate of Duke University, Durham, North Carolina, she received her M.D. degree from the University of Michigan, Ann Arbor, in 1943, and served her internship at the University of Michigan Hospital. She was a resident in ophthalmology at the same hospital from 1943 to 1945.

She is associated with her husband, A. Curtis Jones, Jr., president of the Idaho State Medical Medical Association, in private practice in Boise.

Idaho is one of 13 western states participating in the WICHE program, which provides for state participation in the professional education of students in the fields of medicine, dentistry, dental hygiene and veterinary medicine.

Personals

W. Wray Wilson, Coeur d'Alene, has been elected president of the Idaho Society for Crippled Children and Adults, Inc.

Royal G. Neher, Shoshone, was among 650 who attended the First International Congress of Abdominal Surgeons in September in Rome. Sessions were also held in Paris and London.

Participants in the Rocky Mountain Conference on Family Planning sponsored by the Department of Health, Education and Welfare in Denver Dec. 1-2, included Terrell O. Carver, Boise, and Mary L. Holdren, Boise.

C. C. Johnson, Boise, was state coordinator for Diabetes Week in Idaho, Nov. 13-19. Dr. Johnson said an estimated one out of 50 Americans has diabetes.

James R. Kircher, Burley, association president-elect, has accepted appointment to the Medical Advisory Board of the Sears-Roebuck Foundation. The foundation offers plans and guidance and aids in locating staffs for small medical centers in communities where they are needed and can be supported.

James J. Coughlin, Boise, has been elected to serve a four-year term on the College of Idaho Alumni Executive Committee.

A. Scott Earl, Sun Valley, has been appointed to the Board of Directors of Blue Cross of Idaho to succeed S. C. Taylor, Nampa, who resigned.

Corwin E. Groom, Pocatello, former president of the Idaho State Medical Association, has been elected to the Board of Directors of the Idaho Foundation for Medicine and Biology.

Maurice M. Burkholder, Boise, is new Chief of Staff at St. Alphonsus Hospital, succeeding Claude W. Barrick. Max D. Gudmundsen is vice-president and president-elect, and David M. Barton, secretary-treasurer. Department chairmen are Glenn E. Talboy, surgery; C. Clifford Johnson, medicine; James C. F. Chapman, obstetrics and gynecology, and James L. Hoopingarner, general practice.

Warren T. Sutton, Idaho Falls, has been elected Bonneville County unit chairman of the Idaho division, American Cancer Society, the first physician to serve in this capacity in Idaho. Quentin E. Howard, Boise, is president of the Idaho division, and Robert R. Klamt, St. Anthony, president-elect.

Dr. Popma Heads Study

Alfred M. Popma, Boise, has accepted a post as coordinator of a four-state study under P.L. 89-239 (Heart Disease, Cancer, Stroke and related diseases) financed by a grant to the Western Interstate Commission for Higher Education. He will head the study and be responsible for development of plans for regional medical centers in Idaho, Wyoming, Montana and Nevada.

Dr. Popma has resigned as Director of the Radiology Department of St. Luke's Hospital in Boise, a position he has held since 1938. He will continue to be a consulting member to the staff.

Dr. Popma has recently been appointed to the U.S. Surgeon General's National Advisory Council on Regional Medical Programs.

He is a past president of the Idaho State Medical Association, the Idaho Tuberculosis Association, the Rocky Mountain Radiological Association and the American Cancer Society. He is chairman of the Board of Trustees of the College of Idaho and of the American Medical Association Council on Voluntary Health Agencies.

Las Vegas Meetings Attract Many

The 20th Annual Clinical Session of the American Medical Association and the semi-annual meeting of the House of Delegates, held in Las Vegas, Nov. 27-30, attracted a number of Idaho physicians.

Representing the association at the sessions were: Alexander Barclay, Coeur d'Alene, Idaho AMA delegate; Donald K. Worden, Lewiston, Idaho AMA alternate delegate; President A. Curtis Jones Jr., Boise; Secretary-Treasurer William R. Tregoning, Boise, and staff members.

Others attending were Past President Wallace H. Pierce, Lewiston; Councilors J. B. Marcusen, Nampa, and George W. Warner, Twin Falls; V. Ellis Knight, Kimberly; John F. Barnes, Liwiston; Paul F. Miner and Harold W. Hatten, Boise, and David C. Miller, Pocatello.

Chapter Holds 31st Annual Meeting

The Boise Valley Chapter American College of Surgeons held their 31st annual meeting in Boise, Dec. 4. Guest speaker on the scientific program was Frank F. Allbritten Jr., chairman of the Department of Surgery at the University of Kansas Medical Center, Kansas City.

Other speakers were: Loren D. Blickenstaff, Quentin L. Quickstad, Richard A. Forney, Dean E. Call, Robert S. Smith, John H. Gordon, Edward J. Kiefer, and Leon W. Nowierski, all of Boise.

Newly elected officers for the chapter are: J. Lesley Montgomery, Caldwell, president; Norman G. Hedemark, Boise, vice-president; and Richard O. Vycital, Boise, secretary-treasurer.

State Committees Meet

The Nursing Home Advisory Committee met Dec. 10 in the Owyhee Hotel in Boise. Chairman is Willis L. Hubler, Caldwell, and members are Richard P. Howard, Pocatello; John E. Rockwell, Grangeville; Royal G. Neher, Shoshone; and Russell T. Scott, Lewiston. David C. Miller, Pocatello, attended instead of Howard. Also present was O. E. Merrell, Boise, of the state Health Department.

Emergency medical care in Idaho was under study when members of the Disaster and Civilian Defense Committee met with representatives of the Trauma Committee, American College of Surgeons, the Idaho Health Department and other interested agencies Dec. 10 at the Owyhee Hotel, Boise. Members of the committee are Harold W. Hatten, Boise, chairman; E. E. Gnaedinger, Wallace; C. C. Erickson, Idaho Falls; Willard M. Peterson, Twin Falls, and John Wurster, Pocatello. Richard O. Vycital, Boise, secretary-treasurer of the Boise Valley Chapter, American College of Surgeons, was coordinator of the meeting.

The association's Industrial Medical Committee and Medical Economics and Fee Schedule Committee held a joint meeting Dec. 17 at the Owyhee Hotel in Boise.

Industrial Medical Committee members are: James J. Coughlin, Boise, chairman; Russell Tigert, Jr., Soda Springs; David W. Heusinkveld, Lewiston; Leland K. Krantz, Idaho Falls, and Richard P. Sutton, Burley. Medical Economics and Fee Schedule Committee Members are: Glenn E. Talboy, Boise, chairman; Reuben C. Matson, Jerome; Roland D. Brooks, Moscow; Dennis L. Wight, Pocatello, and G. Curtis Waid, Idaho Falls.

State Association officers and councilors met Dec. 16-17 in Boise. Attending were President A. Curtis Jones Jr., Boise; President-Elect James R. Kircher, Burley; Past President Wallace H. Pierce, Lewiston; Secretary-Treasurer William R. Tregoning, Boise; Councilor John M. Ayers, Moscow; Councilor J. B. Marcusen, Nampa; Councilor George W. Warner, Twin Falls; Councilor O. D. Hoffman, Rexburg; A.M.A. Delegate Alexander Barclay, Coeur d'Alene; A.M.A. Alternate Delegate Donald K. Worden, Lewiston; and Speaker of the House Raymond L. White, Boise.

New Officers Named

New officers of the Upper Snake River District Medical Society are:

President: Kitchener E. Head, Driggs.

continued on page 119

Against these three major pathogens…

Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemolytic Streptococci

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because it combines a high degree of in-vitro activity...

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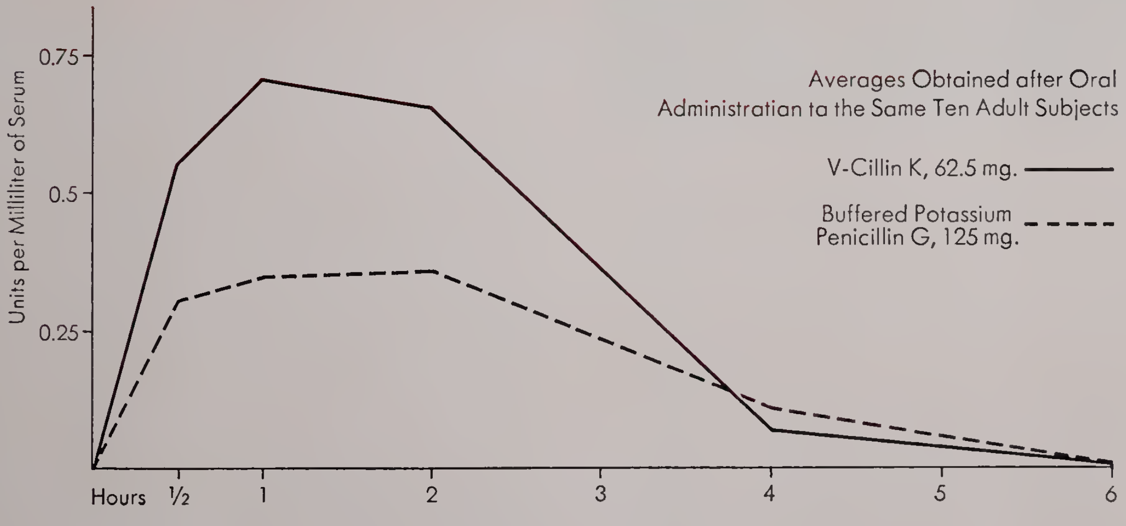
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269 1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

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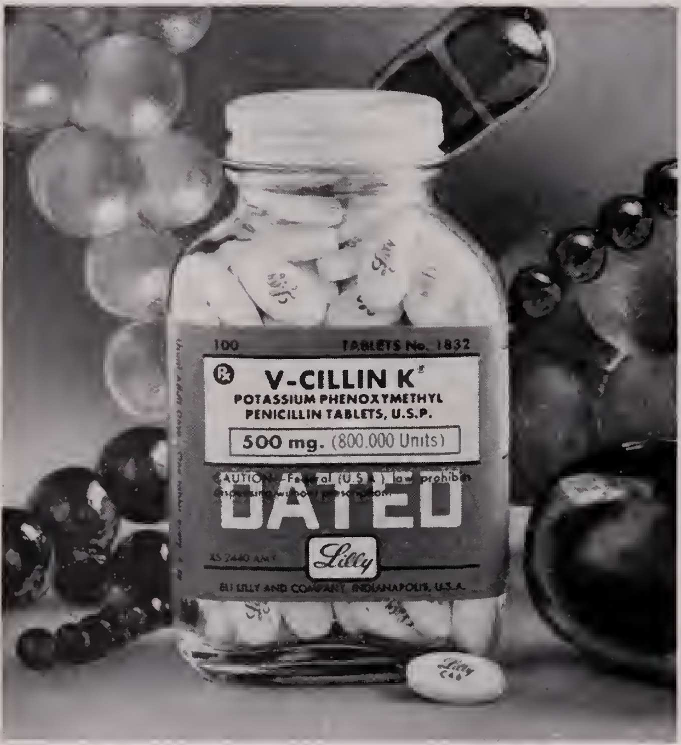
New 500 mg. tablets...a more convenient way to give high doses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TABLETS No. 1832
V-CILLIN K
POTASSIUM PHENOXYMETHYL PENICILLIN TABLETS, U.S.P.
500 mg. (800,000 Units)
CAUTION—Federal (U.S.A.) law prohibits dispensing without prescription
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Lilly
ELI LILLY AND COMPANY, INDIANAPOLIS, U.S.A.

Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin. If hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the overgrowth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

700157

continued from page 115

Vice-President: Lester J. Peterson, Rexburg.
Secretary: Rex G. Mabey, Rexburg.
Treasurer: Robert R. Klamt, St. Anthony.
Delegates: A. Loyd Barrot, St. Anthony, and Blaine H. Passey, Rexburg.
Alternate Delegates: Asael Tall, Rigby, and Emory L. Soule, St. Anthony.

Idaho heart association

Lester C. Crismon, Lewiston, has been elected President of the Idaho Heart Association. Roy O. Shaub, Twin Falls, was named President-Elect, and Robert E. Hay, Nampa, was elected Vice-President at the organization's annual meeting in Boise. Others newly elected as board members were John M. McKain, Twin Falls, John T. Brunn, Meridian, and Robert M. Frazier of Boise.

E. V. Simison elected

E. V. Simison, Pocatello, a Past-President of the Idaho State Medical Association, was named Second Vice-President of the National Association of Hearing and Speech at its conference in San Francisco. Dr. Simison has been a member of the Board of Directors for the past five years and served as a member of the Executive Committee for the past two years.

Medical service bureau elects

New officers elected at the annual stockholder meeting of S. Idaho Medical service bureau are:

F. Wayne Schow, Twin Falls, President; P. Blair Ellsworth, Idaho Falls, Vice-President; William D. Forney, Boise, Secretary-Treasurer.

Reelected as members of the Board of Directors were Russell Tigert, Jr., Soda Springs; and Kenneth R. Droulard, Nampa. Holdover members of the Board are: Maurice E. Scheel, Wendell; David C. Miller, Pocatello; Asael Tall, Rigby; Glenn E. Talboy, Boise; and Mr. Ralph G. Coates, Blackfoot.

A. Curtis Jones, Boise, President and William R. Tregoning, Boise, Secretary-Treasurer of the Idaho State Medical Association, hold board positions by virtue of their offices.

State Board of Medicine Section

The Idaho State Board of Medicine met Jan. 9-11, considering approximately 30 applications for licensure, reviewing disciplinary problems and transacting official business.

Board members are John E. Comstock, Pocatello, chairman; Charles A. Terhune, Burley, vice-chairman; Charles E. Kerrick, Caldwell; James S. Newton, Lewiston; Orland B. Scott, Kellogg, and Robert E. Lloyd, Boise.

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George Washington told the truth (as usual)

"My manner of living is plain and I do not mean
to be put out of it. A glass of wine and a bit of mutton
are always ready, and such as are content
to partake of that are always welcome."

DEAR DOCTOR:

George Washington told the truth (as usual) about cherry trees and wine. He liked wine, as you see above. He hoped his guests would like it, too. And his wife Martha (a famous cook—do you know her book?) liked it, too.

So we do not hesitate, Doctor, to recommend California wines in the diets of yourself and many of your patients. As you know, they provide antibacterial pigments, Vitamin B, amino acids, iron, sugars, polyphenols, and just plain pleasure. We believe that pleasure, for someone in your demanding profession, is very important. Here's to *your* pleasure and health, as well as that of your patients!

We'd like very much to send you (at the drop of a note on your letterhead) two most interesting free booklets: "WINE COOKERY—THE EASY WAY," which will make a kitten of your wife and a barbecue lion of yourself; and "USES OF WINE IN MEDICAL PRACTICE," newly revised, 64 pages, which summarizes a quarter of a century of scientific research on wine and its relation to your patients' well-being. We are quite sure you will find it useful.

Will you drop us a note? You'll receive both booklets free. Here's to your health again, Doctor, with wine!

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GENERAL NEWS

Three Receive ACS Posts

Filling of three important posts in the American College of Surgeons has recently been announced. Joel Baker, Seattle, has been named 1st vice-president. Carl Schlicke, Spokane, was appointed to a three-year term as Commissioner representing the College on the Joint Commission on Accreditation, and Harvey Baker, Portland, has been named to the F.A.C.S. Commission on Cancer.

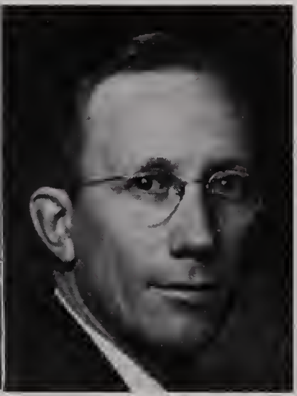
JOEL BAKER, M.D.

CARL P. SCHLICKE, M.D.

HARVEY BAKER, M.D.

Drs. Hogness and Popma Appointed

JOHN R. HOGNESS, M.D.


ALFRED M. POPMA, M.D.

John R. Hogness, Dean of the University of Washington School of Medicine, Seattle, and Alfred M. Popma, Director of the Department of Radiology at St. Luke's Hospital and School of Nursing, Boise, Idaho, were recently appointed to four-year terms on the National Advisory Council on Regional Medical Programs by Surgeon General William H. Stewart.

As members of the 12-member council they will advise the Surgeon General regarding the Division of Regional Medical Programs under P.L. 89-239.

X-Ray of the Month on Page 70

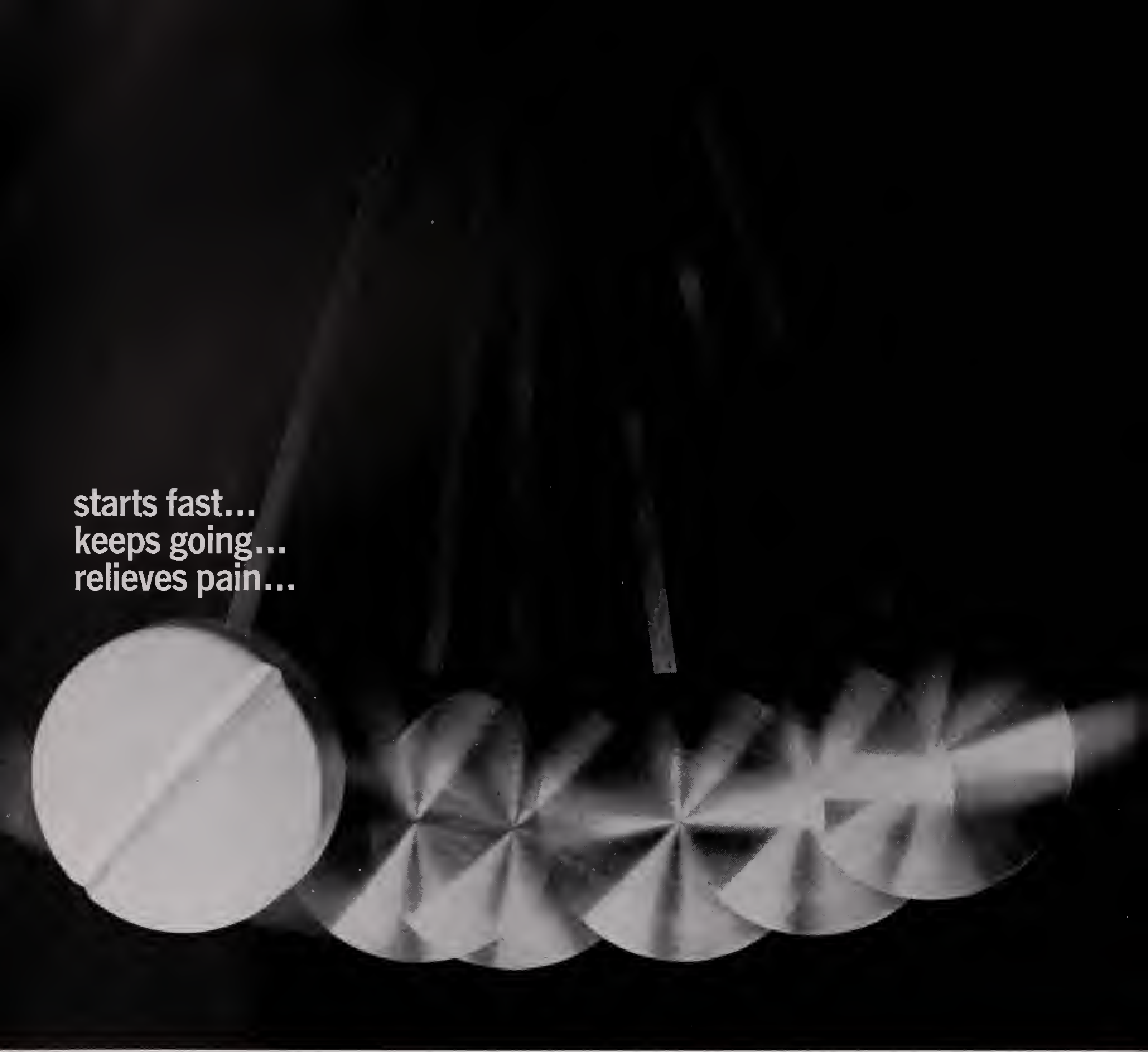
This is the classic appearance of an almost completely healed stress fracture of the third metatarsal. Other names for this particular fracture are "march fracture" and "fatigue fracture". The lack of immobilization allowed slight motion at the fracture site resulting in exhuberant callus formation.

This type of fracture occurs in a normal bone. Overactivity or certain physical strains in persons not conditioned properly, sets up the mechanism.

Other common sites for stress fractures are the oscalcii and proximal tibias.

When the proximal tibia is involved and the fracture line not recognized, erroneous diagnoses of tumor have been made.

There is no neccesity for immobilization at this time because healing is almost complete.



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REVIEWS

Books reviewed in the columns of Northwest Medicine may be borrowed by any subscriber. Write Miss Ruth Hariamert, Librarian, King County Medical Society Library, Room 105, Cobb Bldg., Seattle, Wn. 98101. The library appreciates, but does not demand, reimbursement for postage.

The medical lexicographer

By J. E. Schmidt, M.D., Charlestown, Indiana, 105 pp. Price $4.75. Charles C Thomas, Springfield, Ill., 1966.

If the wound is *dacnogenous* will it be *thanatognomonic* or would the victim be relieved by *catorolysis?* (Cursing might give some relief after a bite that may not be fatal.) *Anisochromiridia* is much less painful but probably not seen frequently in practice of *euthiatrics.* (Physicians in full-time emergency rooms would probably not see many patients with one brown and one blue eye.)

If you have a yen for lexical concatenation you'll enjoy this little book by one of America's most ardent grammatolators. He's a word worshipper and loves to put new ones together. For each newly coined word he provides the roots from which the syllables come—pardon—he gives the syllaboradicis.

H. L. HARTLEY, M.D.

Examination of the urine.

A programmed text in two parts. By John M. Weller, M.D., Professor of Internal Medicine and James A. Green, Jr., M.D., Assistant Professor of Internal Medicine; the Department of Internal Medicine, The University of Michigan, Ann Arbor, Michigan. Part I, 135pp, Part II, 58 pp. Illustrated. Price $8.50. Appleton-Century-Crafts, New York, 1966.

The authors have programmed the important aspects of understanding the potentials of urine examination. A reference book is also supplied containing instructions in technique, illustrative case histories and photomicrographs of urine sediment and renal biopsies. Forty 35 mm color transparencies are provided in strip form with a small viewer to illustrate formed elements in the urine sediment. The quality of the pictures is most satisfactory. I presume the slides are used in order to decrease costs.

The programmed material is well structured. The student or physician who grasps this approach to the point of being able to apply it to the care of his patients will make a true advance in his clinical skill and ability.

I agree with the authors that the urine examination is the most important laboratory procedure done in the initial evaluation of the patient. When done with skill and confidence it not only is a means of diagnosis, but it is also an effective means of ruling out certain renal and systemic diseases.

A few comments on the material itself are probably in order. Instructions for preparing urinary sediment are to resuspend the button in the remaining 0.5 ml before transferring it to a microscope slide. If the sediment button is 0.05 ml or less in volume, a dilution factor of 10 or more is encountered which greatly decreases the chances of finding diagnostic elements in the sediment. Using a standard microscope slide with cover slip instead of a counting chamber makes it necessary to scan a much larger area. This takes more time or encourages skipping.

Case illustration of renal problems are given with renal biopsy pictures and urine sediment pictures. It is my impression that red cell casts indicating glomerular bleeding would have been found more frequently than the case studies indicated, if a more concentrated urine sediment were examined.

The 35mm tranparencies demonstrating types of formed elements are of good quality. No mention is made regarding the superior optics and light source necessary to accomplish this. Even if one appreciates the importance of proper collection and concentration of the fresh urine sediment, the ability to resolve the formed elements in accurate color depends directly on good optics, a hot white light source, and a correctly focused condenser. I mention this because urine sediment studies are often reserved for the worst microscope in the laboratory.

These observation do not diminish by congratulations to the authors for demonstrating clearly and objectively the diagnostic and prognostic potentials of the lowly urine which is excreted daily in large amounts by the rich, poor, the strong, the weak, the healthy, and the ill.

JOHN H. LINDBERG, M.D.

Everyone who has worked in a hospital weekends knows just what a nuisance is caused by the absence of the normal routine, especially the loss of the usual ancillary services. So far no evidence exists to show that any disease or even one obscure strain of bacterium rests on the Lord's day, and until this is forthcoming it is obviously both illogical, and in some instances quite frankly dangerous, not to have every branch of the medical service that is thought necessary for a Wednesday being equally available on a Sunday. For time is wasted when an overworked skeleton weekend service has to play around trying to find the proper tools for the job. Time and money is wasted when people are admitted to hospital and have to hang around until they can be operated on or seen by the appropriate consultant. Time, money, and ink is wasted when traditions fostered by mental arthritis override all suggestions for change. And in the end it is the patients who suffer.

Guy's Hospital Gazette

CLASSIFIED ADVERTISEMENTS

All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than 20th of month preceding date of issue. Proof is not shown. Copy of add as it appeared in the journal accompanies billing.

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DR. CARROLL L. SMITH, *Spokane, Washington, died Aug. 6, 1966, at the age of 87. Dr. Smith practiced 56 years in Spokane and retired in 1961. He was graduated from Northwestern University Medical School, Chicago, in 1904. He was a member of the American Board of Otolaryngology, the American Board of Ophthalmology, and the American Academy of Ophthalmology and Otolaryngology. Cause of death was metastatic carcinoma of prostate due to ateriosclerosis heart disease.*

DR. HILLIS F. GRIFFIN, *Tacoma, Washington, died July 31, 1966. He was 68. Dr. Griffin was born in Griffin County, Ill., and a 1929 graduate of Stritch School of Medicine of Loyola University, Chicago. Cause of death was due to cerebral vascular accident and myocardial infarction.*

DR. KENNETH D. GRAHAM, *66, Aberdeen, Grays Harbor County, Washington, died Aug. 8, 1966. He was born in Oberon, North Dakota, and was a 1926 graduate of the University of Illinois College of Medicine, Chicago. Cause of death was adenocarcinoma of the right lung.*

Additional obituaries on page 82

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AMA Annual—June 18-22; Atlantic City, 1967; San Francisco, 1968.

AMA Clinical—Houston, 1967; Miami Beach, 1968.

Idaho State Medical Association—June 28-July 1, 1967, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society—
Pres., Jack M. Docter, Seattle
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy
Pres., Wallace Lindahl, Seattle
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., John E. Stanwood, Lebanon
Sec., A. C. Jones, Portland

Northwestern Medical Association—
Pres., Frank C. Henry, Seattle
Sec., L. H. Garland, San Francisco
Feb. 13-16, 1967, Sun Valley

Oregon Medical Association—Portland.

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

Washington State Medical Association—Sept. 10-13, 1967, Seattle

West Coast Allergy Society—
Pres., George M. Robins, Portland
Sec., A. G. Corrado, Richland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.).
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres. G. F. Starr, Eugene
Sec., K. D. McMilan, Eugene

Oregon Radiological Society—University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Raphael B. Durfee, Portland
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society—Quarterly Meetings, Congress Hotel, Portland
Pres., Gerald Whitlock, Portland.
Sec., Emerson J. Collier, Portland.

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland.
Sec., David Sellers, Portland

Portland Academy of Pediatrics—1st Monday
Pres., George Nash, Portland
Sec., R. J. Meechan, Portland.

Portland Academy of Psychiatry — Fourth Tuesday except. Dec., Jun., Jul., Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May).
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland.

UOMS Alumni Association
Annual Meeting, April 5-7, 1967
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract.—4th Mon., exc. June, July, Aug., Dec.
Pres., Donald McLaughlin, Seattle
Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto.—3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Frederick F. Ackerman, Seattle
Sec., D. F. Milam, Jr., Bellevue

Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Glen E. Hayden, Seattle
Sec., Harry A. Kettering,
Mercer Island

Seattle Pediatric Society—3rd Friday (Sept.-May), Arctic Club
Pres., Charles Kaplan, Seattle
Sec., Richard Dion, Seattle

Seattle Surg. Soc.—4th Mon. (Sept - June) annual meeting, January 27-28, 1967
Pres., Frank C. Henry, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn, Annual—March 4, 1967
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society — Quarterly
Pres., Charles R. Cavanaugh, Jr., Spokane

Tacoma Academy of Internal Medicine —4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle.
Sec., John E. Nelson, Seattle

Washington Academy of General Practice, Scientific Session, May 25-27, 1967, Seattle
Pres., Charles C. Strong, Vancouver
Sec., Wm. A. Ehlers, Lacey

Washington State Radiological Society —Seattle, Quarterly
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists
Pres., Richard J. Ward, Seattle
Sec., Philip Bridenbaugh, Spokane

Wash. St. Soc. of Allergy.
Pres., Paul Van Arsdel, Jr., Seattle.
Sec., S. H. Tarica, Seattle.

Yakima Surgical Society—Last Thursday (Sept.-May)
Pres., Frank LeCocq, Yakima
Sec., John Harrington, Yakima

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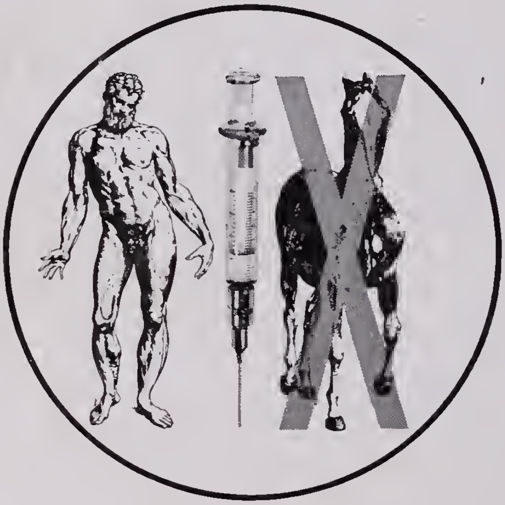

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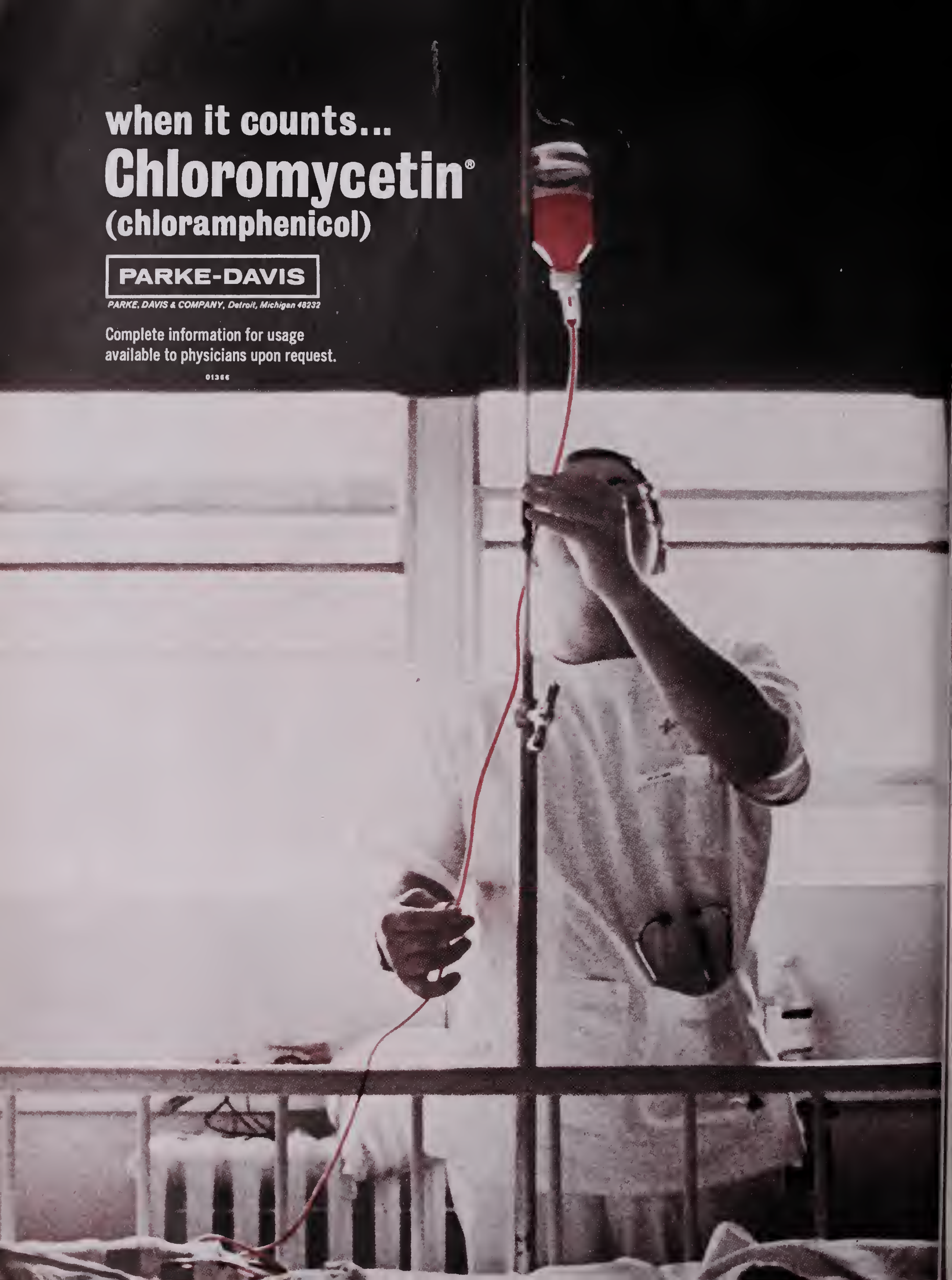

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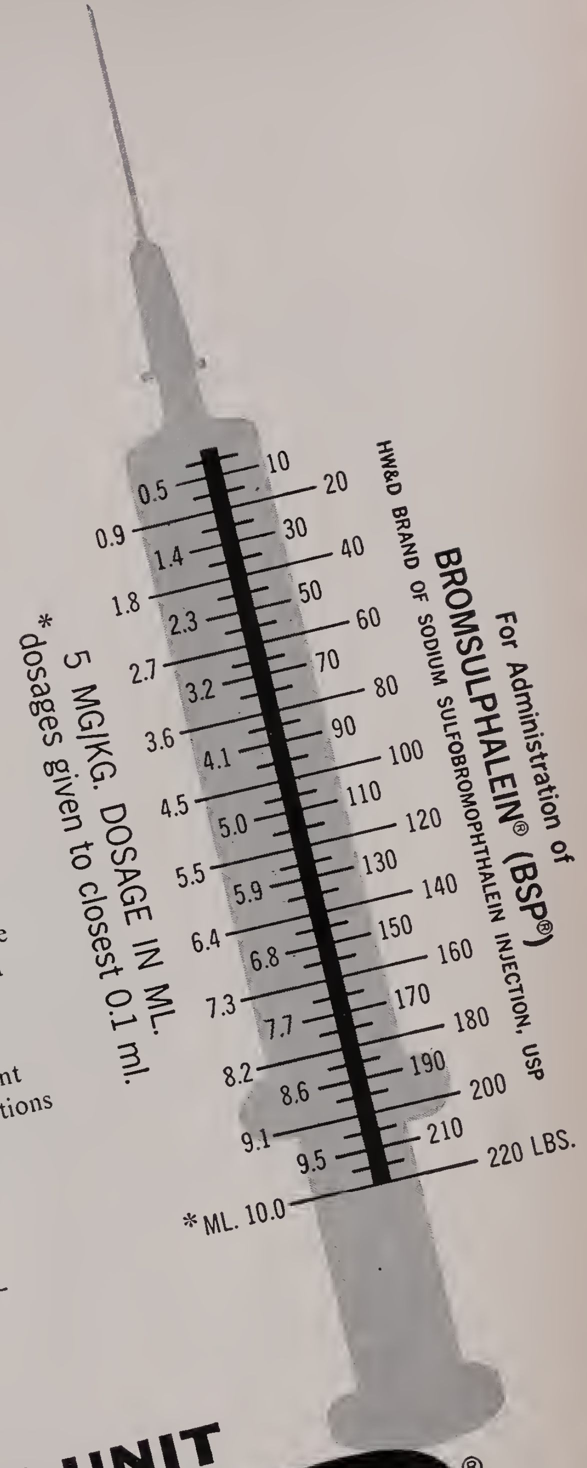

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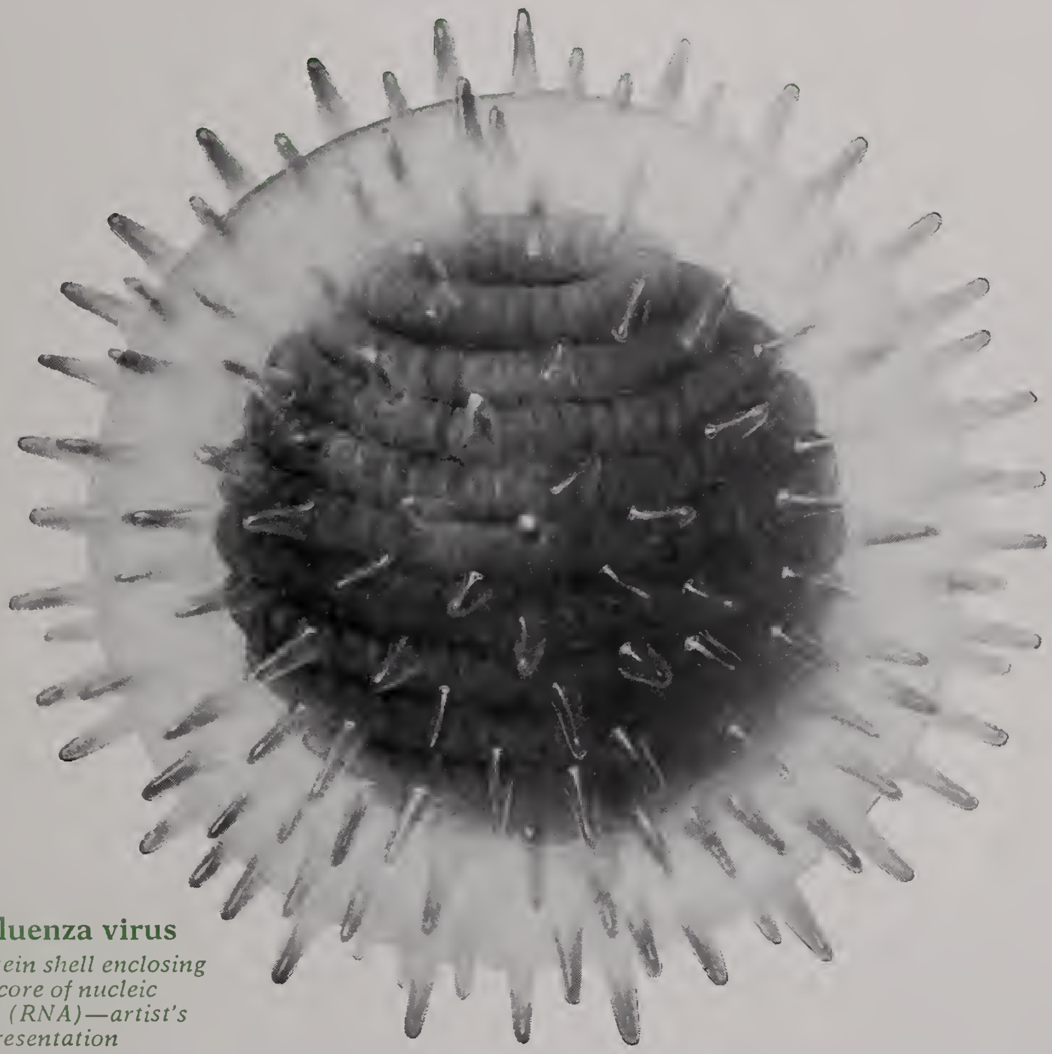
New from Du Pont
Symmetrel®
(Amantadine HCl)

The first oral chemical virostat for the prevention of influenza A_2



Influenza virus

Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

..., specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

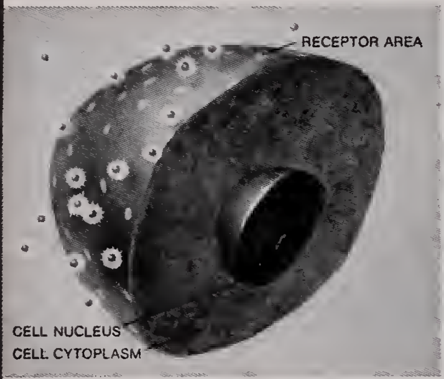
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

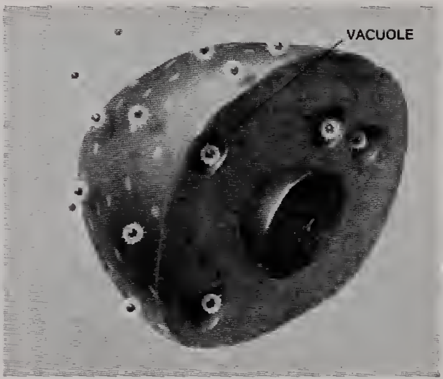
...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

How the influenza virus invades and destroys the untreated cell



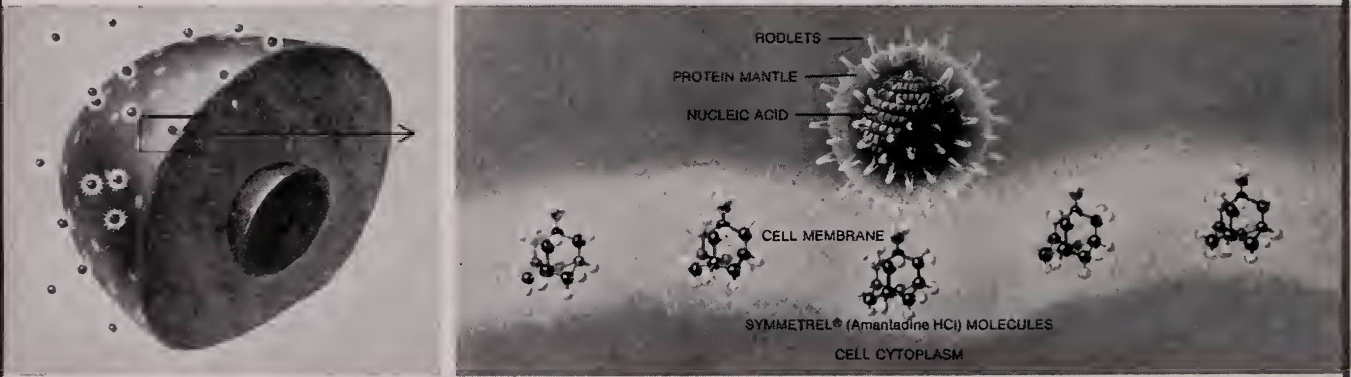
1 Viruses outside the cell attach themselves to specific cell receptor areas



2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm

3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]



Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl.
Syrup: Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

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Symmetrel®

(Amantadine HCl)

A molecular barrier to virus penetration

Norinyl® tablets

(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

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production of a cervical mucus hostile to sperm motility and vitality

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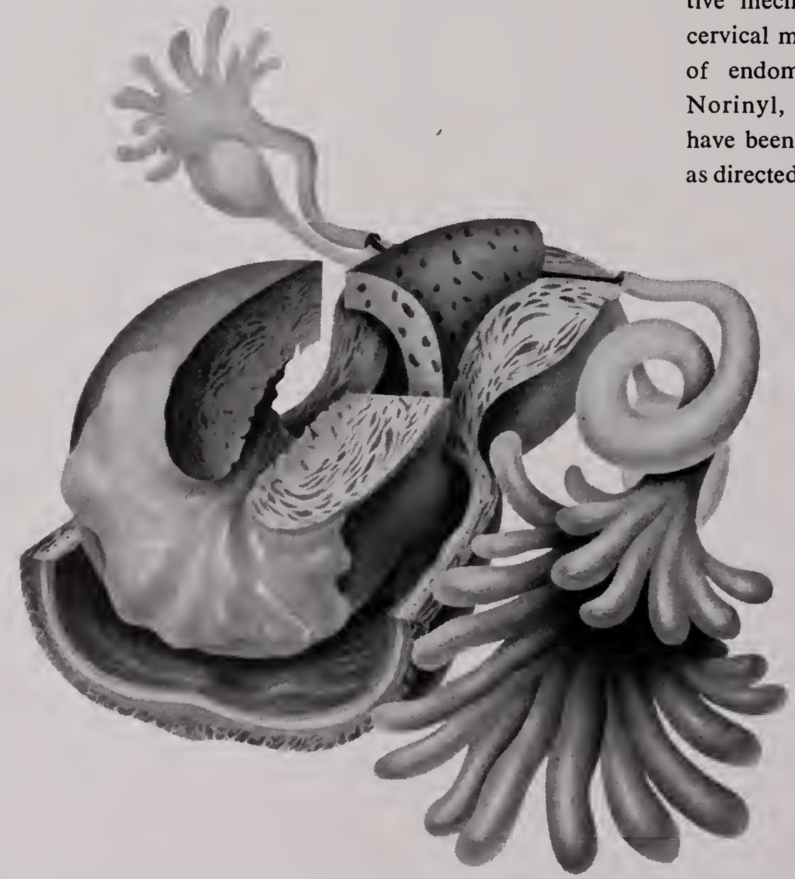

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.

plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.

Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: **1.** Council on Drugs. JAMA 187:664 (Feb. 29) 1964. **2.** Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. **3.** Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. **4.** Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. **5.** Hammond, D. O.: Ibid. **6.** Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. **7.** Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. **8.** Kempers, R. D.: GP 29:88 (Jan.) 1964. **9.** Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. **10.** Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. **11.** Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. **12.** Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. **13.** The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. **14.** Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. **15.** Merritt, R. I.: Appl Ther 6:427 (May) 1964. **16.** Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

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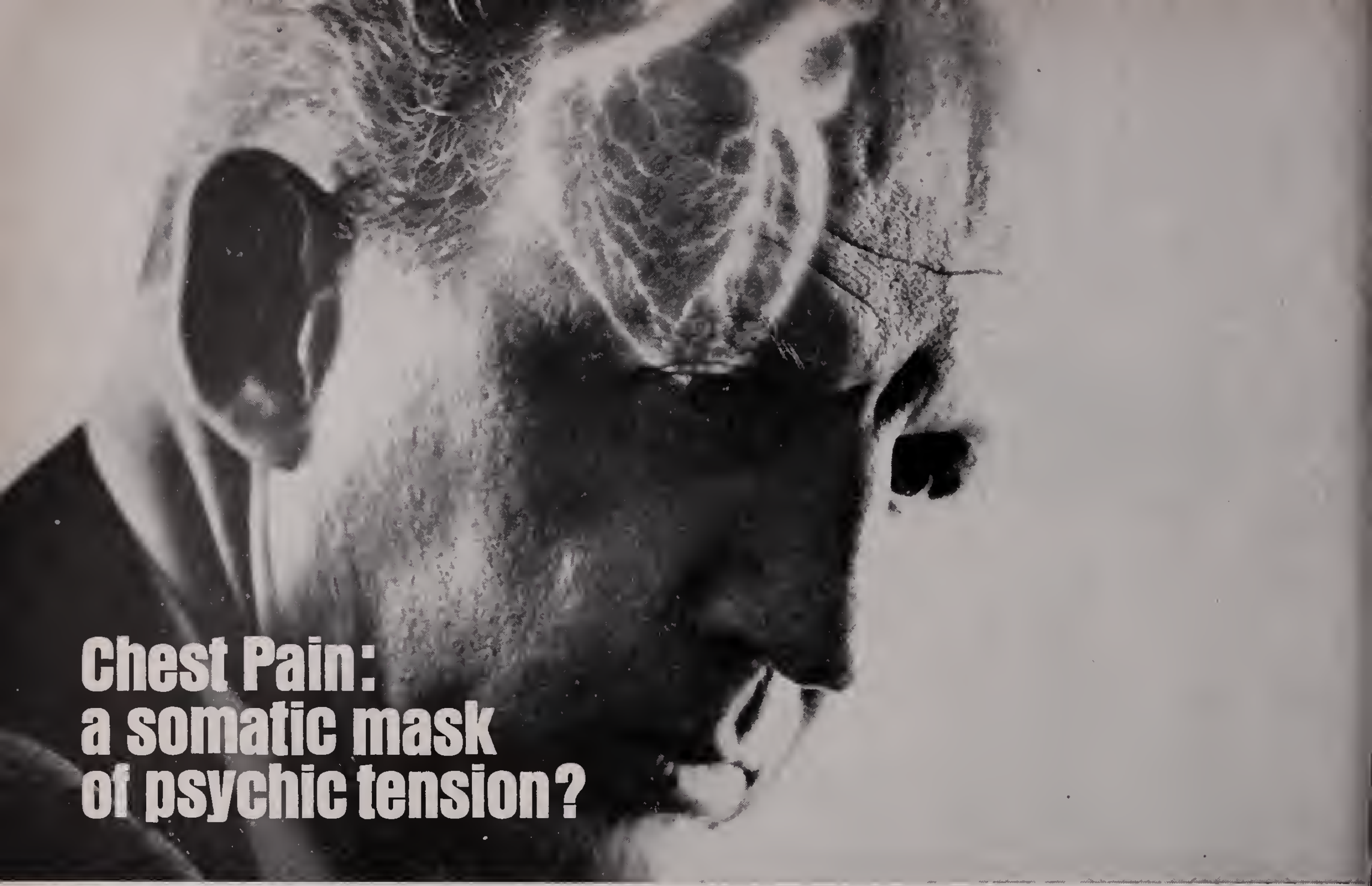

"Heart symptoms"—chest pain, tachycardia, arrhythmia—invariably alarm and preoccupy the patient, though they may be completely without organic basis. Such symptoms often are somatic masks of psychic tension, arising from constant encounters with stressful situations.

When the problem is diagnosed as emotionally produced, consider Valium (diazepam) as adjunctive therapy. Valium (diazepam) acts rapidly to calm the patient, to reduce his psychic tension and relieve associated cardiovascular complaints.

NEUROTIC FATIGUE—the chronic tiredness resulting from emotional strain which so often accompanies psychogenic "heart" symptoms—also can be alleviated by this highly useful agent. Valium (diazepam) often achieves results where other psychotherapeutic agents have failed.

Valium (diazepam) is generally well tolerated, and usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

Contraindications: Infants, patients with history of convulsive disorders or glaucoma.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances and hallucinations) and changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage — Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hrs, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.

Supplied: Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 for convenience and economy in prescribing.

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for somatic symptoms of psychic tension

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(diazepam)

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TUBEX sterile cartridge-needle units are prefilled with measured doses. Each unit is used once, and discarded. This eliminates danger of cross contamination, as well as problems of sterilization, storage, and measurement. Ultra-sharp, siliconized needles keep patient discomfort to a minimum. No other injectable system is easier to use, easier to store, easier to carry.

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Supporting Educational and Communications Needs

Editor, NORTHWEST MEDICINE:

The recent and forthcoming legislative changes have had a profound influence on the practice of medicine and have necessitated closed communications among physicians on a local level. Medicare, with its attendant regulations, and the advent of Title XIX, make it mandatory for every physician to be aware of regulations and requirements imposed by these programs. We at Wyeth recognize that much of the dissemination of these new guide lines for medical practice is accomplished through the state medical journal. Besides being an effective medium for communicating to physicians, it is also well-known that the state medical journal plays a vital role in postgraduate medical education of the practicing physician.

Recognizing these two vital functions of the state medical journal, we at Wyeth for the first time have planned, on a trial basis, to utilize these journals in our promotional efforts. Because both the aspect of medical communications and continuing medical education are so important we feel that anything we can do to support your state medical journal will in essence be of service to the practicing physician in your state. We are pleased that we will be a regular advertiser in your publication during 1967 and hope that your society and the physician members as well as Wyeth can benefit from this project.

In order to get to know you better and to have you and your organization know Wyeth better we hope that during the course of the coming year one of our management group together with our local sales manager can get together with you, the executive secretary and the president of the medical society at a luncheon meeting for discussion of problems of mutual interest. At such a time when we plan to visit your area, I will contact you with regards to the possibility of arranging a luncheon.

By participating in advertising support of your official state journal, we at Wyeth hope that we can contribute to both the educational and communication needs of the practicing physician in your state.

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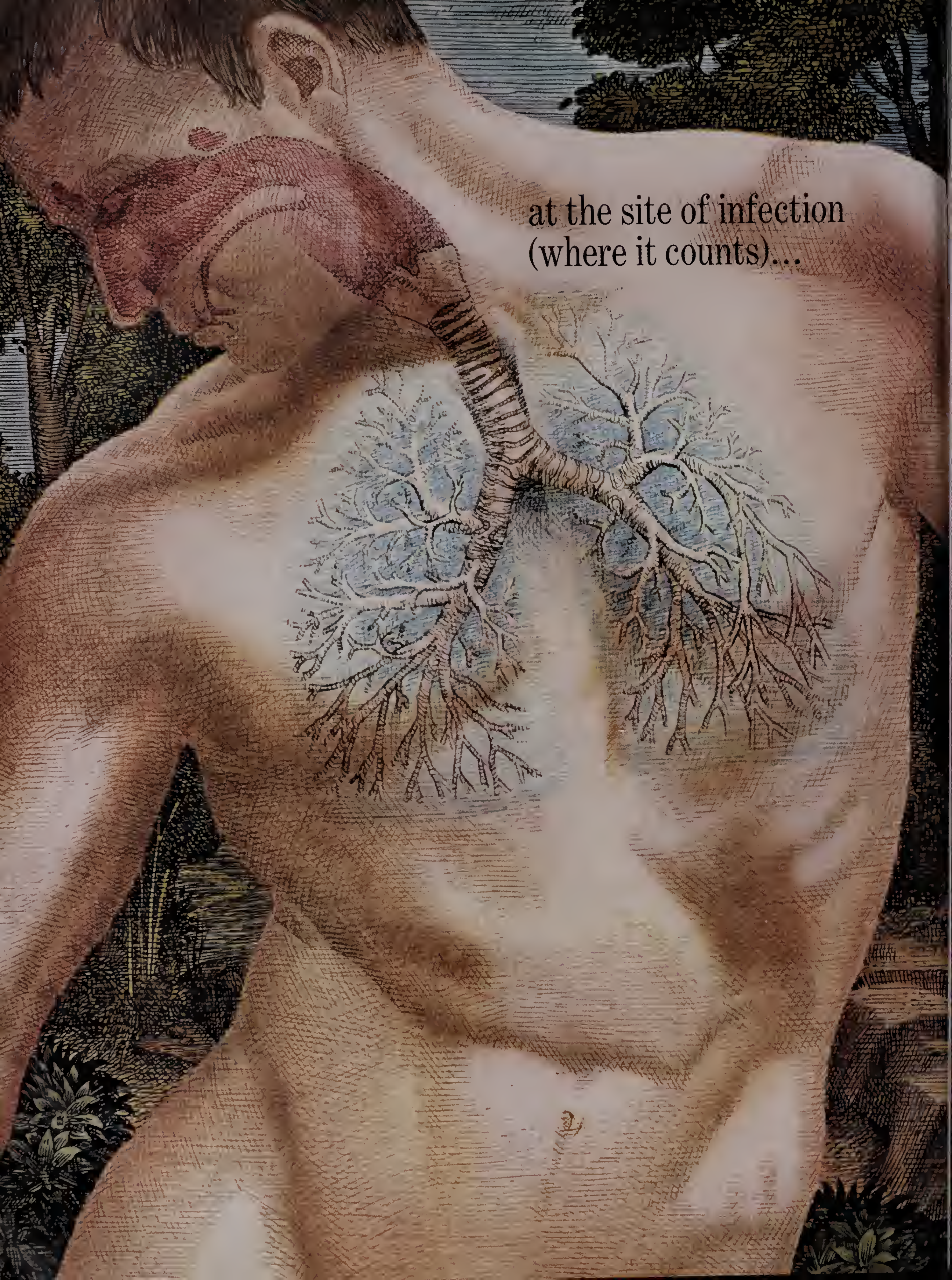
at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

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(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247:*69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12:*398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239:*198, 1960.

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Repeatedly in published clinical studies,[1-10] investigators stress the following therapeutic characteristics:

- relief of inflammatory pain (non-traumatic) is prompt—particularly when administered early.[1-4]
- disability time is shortened from weeks to days.[7]
- so specifically effective is Protamide that a positive response is diagnostic of inflammatory neuritis.[3,4]
- prompt relief is observed even in ophthalmic herpes zoster.[5,6]
- incidence of sequelae such as postherpetic neuralgia is reduced.[1-4]
- consistently described as the therapy of choice.[1,3-6]

Administration:
In neuritis and herpes zoster, one ampul I.M. daily for 2 to 5 days usually relieves pain completely in patients treated early. Well tolerated.[1-10] However, inadvertent intravenous administration may cause anaphylactoid reaction.

—Boxes of 10 ampuls, 1.3 cc. each.—

References: (1) Baker, A. G.: Penn. Med. J. *63*:697-698 (May) 1960. (2) Smith, R. T.: New York Med. *8*:16-19 (Aug. 20) 1952. (3) Smith, R. T.: Med. Clin. N. America (March) 1957. (4) Lehrer, H. W.; Lehrer, H. G., and Lehrer, D. R.: Northw. Med. *54*:1249-1252 (Nov.) 1955. (5) Sforzolini, G. S.: Arch Ophthal. *62*-381-385 (Sept.) 1959. (6) Shupala, E.: W. Virginia Med. J. *56*:191-193 (June) 1960. (7) Xander, G. W.: Western Med. *1*:14-17 (Sept.) 1960. (8) Combs, F. C., and Canizares, O.: New York J. Med. (Mar. 15) 1952, pp. 706-708. (9) Marsh, W. C.: U.S. Armed Forces Med. J. *1*:1045 (Sept.) 1950. (10) Love, T. R.: Rocky Mountain Med. J. *50*:873 (Nov.) 1953.

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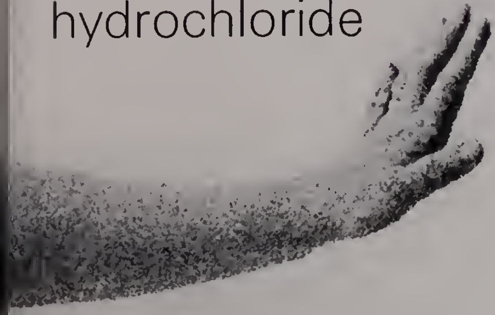

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In one double-blind program* involving diet, close doctor/patient cooperation, exercise, posture instruction, and follow-up visits, 93 obese patients received Preludin or a placebo. The drug and placebo were alternated every four weeks. This procedure lasted from 8 to 35 weeks.

Sixty-one percent of the patients lost more weight on Preludin than on placebo. In fact, they lost an average 1.9 pounds per week—almost four times as much as when they were on placebo!

For a decade Preludin has demonstrated similar results. Its effectiveness has been described in more than 300 published clinical reports involving more than 10,000 patients.

Preludin curbs appetite without excessive stimulation. It will work in your weight-control programs too.

*Barnes, R. H.: J.A.M.A. 166:898, 1958.

Preludin® tablets of 25 mg.
Endurets® prolonged-action tablets of 75 mg.
Dosage: One 25 mg. tablet two or three times daily, or one 75 mg. Endurets tablet once daily.
Contraindications: Severe coronary artery disease, hyperthyroidism, severe hypertension, nervous instability, and agitated prepsychotic states. Do not use with other CNS stimulants, including MAO inhibitors.
Warning: Do not use during the first trimester of pregnancy unless potential benefits outweigh possible risks.
Precautions: Use with caution in *moderate* hypertension and cardiac decompensation. Excessive use may result in a psychotic illness manifested by restlessness, mood or behavior changes, hallucinations, or delusions.
Side Effects: Dryness or unpleasant taste in the mouth, urticaria, and (rarely) overstimulation, insomnia, dizziness, nausea, or headache.

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Geigy
Geigy Pharmaceuticals
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LOMOTIL® tablets liquid

Each tablet and each 5 cc. of liquid contains:

diphenoxylate hydrochloride . . . . (Warning: May be habit forming)	2.5 mg.
atropine sulfate	0.025 mg.

in gastroenteritis, acute infections

Effectiveness—Physiologic evidence indicates that Lomotil acts directly on the smooth muscle of the bowel to lower motility and control diarrhea. This action is unsurpassed in promptness and efficiency.

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Versatility—The therapeutic efficiency, safety and convenience of Lomotil may be used to advantage alone or adjunctively in diarrhea associated with:

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- **Irritable bowel**
- **Acute infections**
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- **Regional enteritis**
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- **Ulcerative colitis**
- **Food poisoning**
- **Drug therapy**

For correct therapeutic effect
Rx correct therapeutic dosage

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage	
3-6 mo. . .	½ tsp.* t.i.d. (3 mg.)
6-12 mo. .	½ tsp. q.i.d. (4 mg.)
1-2 yr. . . .	½ tsp. 5 times daily (5 mg.)
2-5 yr. . . .	1 tsp. t.i.d. (6 mg.)
5-8 yr. . . .	1 tsp. q.i.d. (8 mg.)
8-12 yr. . .	1 tsp. 5 times daily (10 mg.)
Adults: . .	2 tsp. 5 times daily (20 mg.) (or 2 tablets q.i.d.)

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

Precautions: Lomotil, brand of diphenoxylate hydrochloride with atropine sulfate, is a Federally exempt narcotic preparation of very low addictive potential. Lomotil should be kept out of reach of children since accidental overdosage may cause severe respiratory depression. Recommended dosages should not be exceeded. Lomotil should be used with caution in patients with impaired liver function and in patients taking addicting drugs or barbiturates. The subtherapeutic amount of atropine is added to discourage deliberate overdosage.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE *Research in the Service of Medicine*

Bedside Care for the Postoperative Patient

In a recent bout of prolonged surgical hospitalization, I found that from a patient's viewpoint there occurred a lamentable gap between the physician's interest and the procedures delegated to the nursing department.

As a physician, I know that I would not now be alive (with only minor disabilities) if during this recent hospitalization I had not had surgeons capable of modern and complex techniques. My surgeons were most attentive in the realm of fluid, mineral, and blood replacement. They controlled antibiotic administration with detailed bacteriological cultures and sensitivity studies. The hospital I was in had ample nurses for bedside patient care. They were superior in medication administration, in the care of the skin, and in emotional support of a patient who had more than normal post-surgical depression. Nevertheless, the attending physician's specialized interests (and a consequence lack of orders to the nursing staff) left in the sphere of patient care an area needing attention without anyone taking the interest and the responsibility that was called for. This gap in interests, this failure to think of the patient as a whole functioning person, increased discomfort and made for increased dependency on the nursing staff.

I am sure that most elderly surgical patients will have a more comfortable convalescence, if on their return to the ward from the operating room, they are placed in a bed equipped with a fracture board. During their anesthesia, the firmness of the operating table has minimized the stress placed upon their old and inelastic ligaments. It is this connective tissue which holds the skeleton together during anesthesia with its ablation of muscle tone. Until normal muscle tone is regained through activity, unaccustomed stress is placed on these ligaments. If this stress is not minimized by use of a fracture board, back and leg ache, with restless nights, are not infrequent. The orthopedic surgeons have learned the value of such fracture boards for their long-term geriatric patients. I strongly suggest that this simple measure be more often considered by the abdominal surgeon.

Another constant worry of the surgeon in charge of the geriatric patient is thrombophlebitis and pulmonary embolism. We know that this is minimized by activity. An overhead trapeze bar and a foot board, by making motion easier, increase the activity of the elderly patient. These orthopedic devices help the geriatric surgical patient keep "wiggling." As a beneficial by-product, these mechanical aids will lessen nursing work in positioning the patient in bed.

A third simple technique that will promote patient movement is the correct placing of the IV catheter or needle. This should be placed in the arm on the same side of the body that has the abdominal incision. The patient will use his free arm to lift himself by means of the trapeze. When such lifting occurs, the abdominal muscles tighten on the side of the abdomen corresponding to the arm being used. If this side of the abdomen contains a fresh surgical incision, patient discomfort is increased. If the incision is on the right side, the IV therapy should be in the right arm. Then the patient will be most active in bed, using his left arm to lift himself on the trapeze. Thus, he will "wiggle" more and be less likely to have thrombophlebitis.

Until they have used a bedpan, elderly patients do not realize how uncomfortable and how unnatural is its use. Likewise, until they have been helped out of bed for the first time following surgery, this maneuver is dreaded as an ordeal. After the discomfort of the bedpan is known, and the patient has had demonstrated the fact that getting out of bed is not an ordeal, he should be allowed, with help, to use a commode, with arm rests, placed beside the bed. This gives a purpose to getting out of bed.

In addition to the commode being more comfortable than the bedpan, evacuations are accomplished with less heart and less incision strain. Psychologically, the patient feels he has made a start in returning toward normal living habits.

I am sure our patients would appreciate having those four items of medical-nursing arts made the concern of both physician and nurse. Such concern would promote more rapid convalescence and it would minimize postoperative disability and discomfort. ■

K. K. Sherwood, M.D.

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Chest Plethysmography

Recording of Functional Volume Exchange by the Electrical Impedance Plethysmograph

LEWIS C. ROBERTSON, M.D., Lakeview, Oregon

This is a study of observed changes in displacement curves obtained by the electrical impedance plethysmograph from multiple positions on the chest. Cardiac events are identified by the time occurrence of repetitive deflections seen during systole and diastole. The form of the curve is entirely dependent upon volume exchange as recorded by a given lead, and by relation of the lead to the heart chamber which is involved. Thus the tracing may vary between the classical ventricular volume curve, and a curve which represents atrial function.

Four time based deflections relate to known events in the cardiac cycle, and are most distinct in specific leads. These are key positions for the study of cardiac function. A special lead beyond the heart mass isolates pulmonary volume exchange from intra-cardiac events.

It is apparent that these chest leads provide a reproducible curve descriptive of normal cardiac events. Those who have found time and interest to observe other indirect indicators of cardiac function will appreciate the physical detail afforded by this method.

Stimuli for this study lie in the similarity of chest impedance plethysmographic curves to the ventricular volume curve and the possibility for examination of cardiac function by indirect means. To an extent, the method is direct as it describes an underlying event, whereas other indirect parameters such as the carotid and jugular pulses require interpretation based upon a reflected distortion of the normal curve. It appears that this curve describes volume exchange and suggests the velocity of flow.

Background extends over many years and the work of many investigators. At present, practical application of plethysmography is confined to analysis of peripheral vascular disease. That this should be so is dependent upon a host of factors. The most prominent problem has been the search for a chest lead that would significantly express the pulsatory function of the heart.

The present study is by direct observation of recorded effects as they relate to time, and other methods. Illustrations and data are from patients presumed free from marked valvular disease, decompensation, and arrhythmia. An attempt will be made to show the sequential relation of multiple electrode leads to cardiac function.

theory of system

The basis upon which this system records volume exchange relates to the use of two electrodes with a high frequency signal current, and detection of electrical impedance (resistance) variation. The signal is said to disperse in the manner of the lines of force between poles of a magnet, with the greatest current flowing through areas of lowest ohmic resistance. Cyclic addition and subtraction of blood volume continuously alters resistance. This simple explanation is not sufficiently concise for observed factors of direction and distant overlap. However at present I have not been able to find further acceptable evidence for theoretical support of the physical description provided by these curves.

equipment

The equipment used consists of a two-channel electrical impedance plethysmograph* with a 30 Kc signal, and a two-channel direct writer recorder.** An in-line ohmmeter was used to study the effect of contact resistance. The long time-constant of the plethysmograph was used for best reproduction of slow changes and attenuation was at the mid point. The EKG recorder was attenuated to an acceptable curve, and tracings were carefully marked to indicate this by X1, X2, X5, and X10. Average attenuation was at X5. Standardization was 10 mm/mv at X1. Thus at X1, 1 mm = 0.1 mv.; and at X5, 1 mm = 0.5 mv. Paper speed was 25 mm per second unless otherwise indicated.

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*Impedance plethysmograph 225—Parks Electronics Laboratory, Beaverton, Oregon.

**Twin Viso EKG—Sanborn Co., Waltham, Mass.

technique

Study of an individual by this technique requires 15 to 30 minutes of undivided attention. Skin areas are carefully prepared, and electrode paste is generously applied with care to prevent contact between the standard chest suction cups. Electrodes are placed in pairs (close to the sternal borders) from the 2nd to the 5th intercostal spaces. These leads are designated from left to right: L5-R5, L4-R4, L3-R3, and L2-R2. Oblique leads L5-R3, and L3-R5 are very informative; L5-L3 is a vertical left sternal border placement, In some patients horizontal recording is made from the 6th ICS. Nine leads may be recorded for close study of events. However L4-R4 is an average of the area between L3-R3 and L5-R5, and the short obliques L5-R4 and L4-R5 do not seem to be of special value. Hence, maximum information may be had with six leads.

Purpose in this placement is to obtain curves from areas within the boundaries of the cardiac mass. Three horizontal positions for examination of sequential changes from the atria to the ventricular chambers; one vertical (left sternal border) curve which frequently summarizes the horizontal findings; two to four oblique curves, one of which usually demonstrates the direction of greatest LV volume exchange; and one curve taken outside the cardiac mass to demonstrate pulmonary effects. The latter is usually obtained horizontally in the 2nd intercostal space, but may be as low as the 3rd.

The vertical right sternal border lead (R5-R3) is frequently beyond the cardiac mass and similar in form to the pulmonary wave. This lead becomes significant when the heart mass is extended to the right.

An apex lead to a theoretical point is also inconsistent. In the manner of the right vertical lead, it becomes important when the heart mass extends to the left. In this case an arbitrary point is chosen at the V-4 position, and leads are recorded from two angles, L5-Ap & L3-Ap.

Two selected channels of plethysmograms recorded simultaneously are frequently necessary for identification of the onset of the LV negative deflection. Timing is predominately with a second channel of EKG by close attention to the relationship of the QT interval. Experimentally, plethysmographic leads are associated with other parameters such as heart sounds, jugular trace, carotid trace, and occasionally the apex cardiogram. The ACG is recorded better in the left lateral position which shifts the cardiac mass. However it is apparent that for practical purposes the EKG-QT interval is sufficient for empirical analysis. All leads are recorded in relaxed expiratory apnea, to position the diaphragm.

description of the recorded curves

The chest impedance curve is dependent upon the electrode position and the skin surface angle as they relate to the cardiac mass. For a given lead placement, there is maximum indication of the proximate volume exchange, and the curve may be altered by overlapping effects. Events which are relatively distant are physiologically attenuated or even obscured. In a lead which is placed over the area of more than one chamber there may be indication of several proximate effects during different periods of time base.

For purposes of clarity an attempt may be made to define the present use of the terms proximate, overlap, and time base.

Proximate effect is that variation in the curve which is due to volume exchange very close to the overlying lead.

Overlap effect is the condition where the direction of the deflection indicates an event distant to the lead but to an attenuated degree.

Time base is a device for relating expected events. Any parameter may be used but because of easy recognition the EKG is the most efficient.

Studies of others have been quoted by Moulopoulos[1] to indicate that a relationship exists in which the right ventricle begins to eject before the left, but completes its loss of volume at a later time. He gives figures provided from studies of Braunwald which are convenient for purposes of further discussion:

> Onset of the Q wave of the EKG to the onset of right ventricular ejection: 0.080

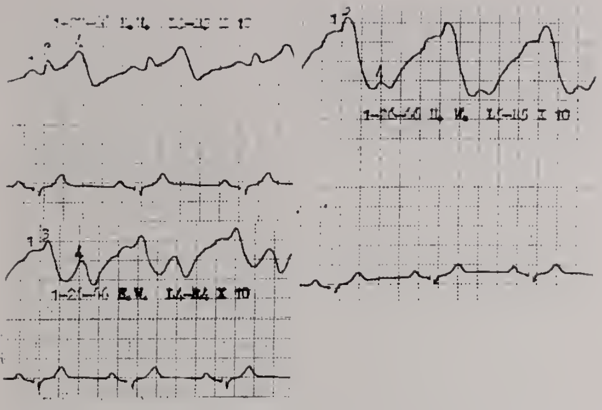

Fig. 1. These tracings represent sequential curve changes observed in transternal horizontal leads from the 3rd to the 5th intercostal spaces. They demonstrate variable pattern types seen in multiple chest leads.

From top to bottom, the deflection indicated as number 3 begins in the 3rd ICS with a small negative amplitude and a short time duration. Both amplitude and time period increase in the 4th and 5th intercostal spaces. This deflection occurs during the period of LV ejection.

The opposite occurs in number 4 where the greatest negative deflection is indicated in the 3rd ICS. This is a volume loss, but during the period of early rapid passive LV filling. In the 5th ICS number 4 is becoming intermediate atrial loss and ventricular filling.

seconds. Onset of the Q wave of the EKG to the onset of left ventricular ejection: 0.115 seconds.

In this study it has been apparent that one may easily pick out certain time intervals in relation to the QT interval, which will indicate systolic and diastolic events.

1. *General.* In a general way the curve may be described by direction of deflection. Ejection is negative and filling positive. The reverse could be true but tradition has fixed this arrangement by indicating the filling wave of the peripheral pulse as a positive or upright deviation.

Almost any position shows some evidence of the total events of volume displacement, however the shape of the curve favors the proximate effect. Explanation of this is seen in horizontal leads arranged in sequence from the 3rd to the 5th ICS, Figure 1. The upper example (L3-R3) demonstrates a small negative deflection during the time base period of left ventricular ejection and is due to overlap. More prominent is the negative deflection which occurs during the time base of rapid (passive) atrial volume loss. This is a proximate effect because the lead position favors the area in which we would expect to find the left atrium. In the example on the right (L5-R5), greatest deflection occurs during the period of left ventricular ejection and this lead is well within the expected ventricular area. The second example (L4-R4), demonstrates a curve that averages the others.

Thus it is seen that chest impedance plethysmographic curves relate well to lead positions.

2. *The negative phases.* There are four prominent phase periods in the total curve. These deflections are usually negative, and there is maximum deviation in leads where we would expect the proximate effect during that time base period, Figure 2. These phases correlate well with the volume exchange of: 1. active atrial ejection, 2. RV ejection, 3. LV ejection,

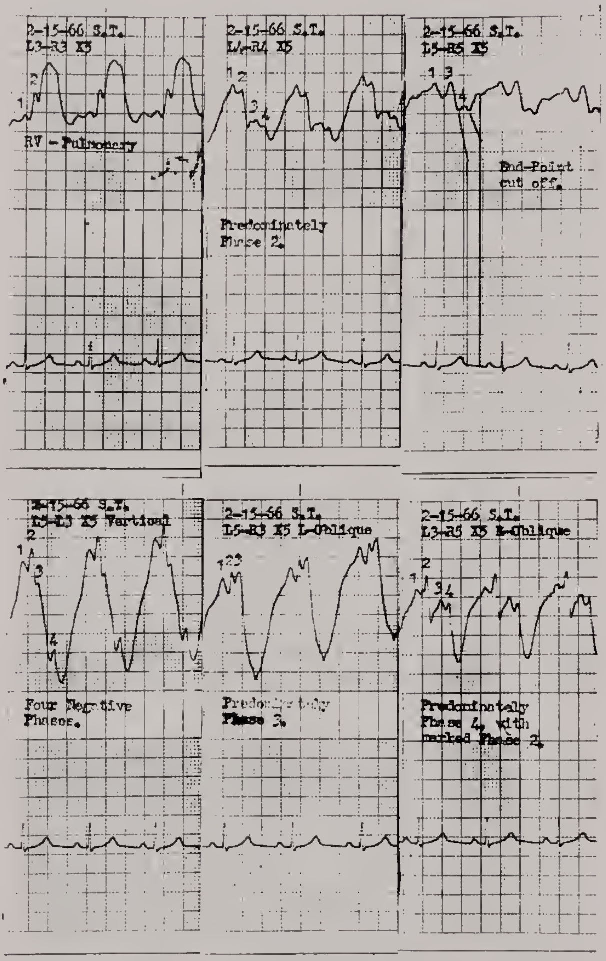

Fig. 2. The upper three tracings from left to right demonstrate changes in horizontal leads from the 3rd to the 5th intercostal spaces. The first example is an extra-cardiac-mass pulmonary type curve. The second shows negative ejection phases 1, 2, and 4. Here LV ejection is badly obscured. The third example shows ejection phases 1 and 3 with a suggesion of 4. In this tracing the LV and left atrial end-point are cut off.

The lower three tracings demonstrate vertical and oblique leads. The vertical L5-L3 tracing demonstrates a marked separation of the four negative phases of volume loss. The left oblique L5-R3 shows negative phase 1, suggests phase 2 and is predominately phase 3. The right oblique L3-R5 shows phase 1, accentuates phases 2 and 4 and lightly indicates phase 3.

and 4. early rapid (passive) left atrial ejection. Argument may be had over number 2, as there is not entire satisfaction for support of the definition; however, another way to inspect RV events is by the pulmonary curve, Figure 4.

3. *The initial positive wave.* The initial positive wave, which usually occurs before the LV negative deflection, is interesting. Nyboer, in his monograph, demonstrates a few chest curves.[2] He mentions the initial positive wave, and attributes it to the effect of isometric contraction. I cannot entirely agree with his explanation as I doubt that tensing effects are demonstrated. This deflection, Figure 3, begins at a time comparable to the quoted onset of left ventricular ejection (0.115 sec.). The negative LV (ejection) deflection occurs about 0.18 seconds after the Q wave. Rushmer demonstrates very similar curves by an inductance meter placed in the left ventricle of dogs to measure the diameter.[3] He states that a sudden LV dilatation occurs just before ejection producing an initial positive deflection.

4. *The left ventricular curve.* The chest impedance plethysmogram recorded over the cardiac mass occasionally resembles the typical ventricular volume curve, Figure 5, but more often it does not. Occasionally one may record all four negative phases in one lead, Figure 2. More frequently, events will be demonstrated by separate selected leads. A lead most typical for left ventricular volume exchange will demonstrate a brief and late initial positive wave, Figure 5, followed by a deep rapid negative deflection to a time area between the peak and end of the EKG T wave. After this there is a moderately rapid positive deflection of filling, with a notch which times with the end of rapid passive filling. In this case phase 4 is positive,

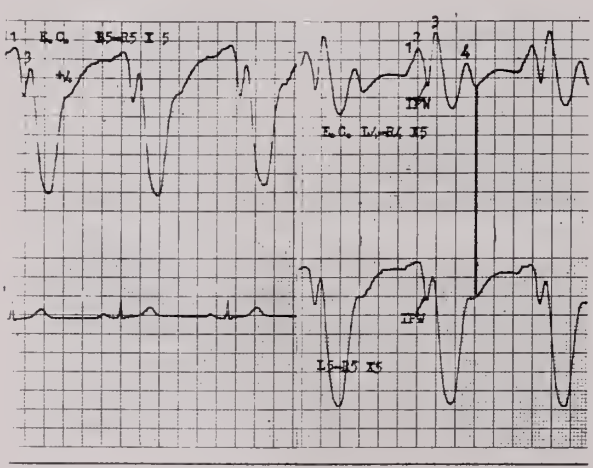

Fig. 3. The initial positive wave as seen in these horizontal tracings begins about 0.14 seconds after the Q wave of the EKG. The duration is 0.06 seconds in the 5th ICS, and 0.08 seconds in the 4th. In this patient the 3rd ICS demonstrated an extra-cardiac-mass curve (not shown). Worthy of mention is the reproduction of the R5-L5 curve recorded at separate intervals simply by asking for held expiratory apnea.

At the 4th ICS, displacement of the initial positive wave is much greater but the time of onset is the same. As noted above, the peak occurs 0.02 second later. This lead also describes a time based negative wave of passive atrial ejection. Compare the end of this wave with the notch in the poistive wave of early LV filling as recorded in the 5th ICS.

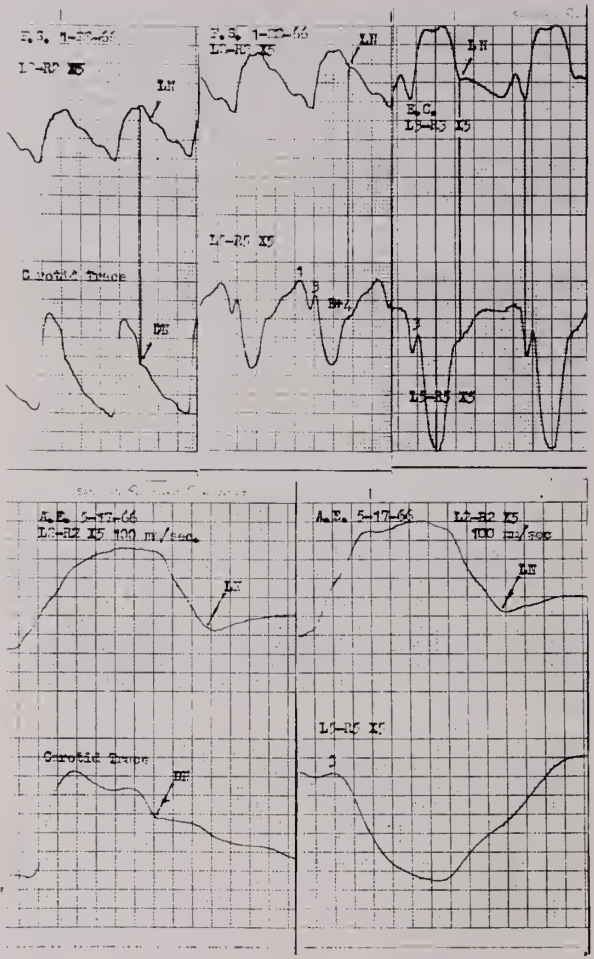

Fig. 4. The pulmonary curve. DN: dichrotic notch. CT: carotid trace. LN: late dichrotic notch. This tracing is similar in form to the carotid pulse. In the upper tracings certain differences are noted. In the first example it is noted that the DN of the C.T. occurs during a time where there is a relative plateau in the pulmonary curve. Also, the dichrotic notch in the pulmonary curve occurs at a much later time.

The second tracing from the same patient, and a third tracing from another patient, demonstrate the late dichrotic notch at the time of the end of early rapid passive LV filling. It is also noted that a slight notch in the plateau of the pulmonary curve seems to coincide with the end of LV ejection.

In the lower tracings which are recorded four times as fast as the upper curves, the same phenomena is demonstrated from another patient.

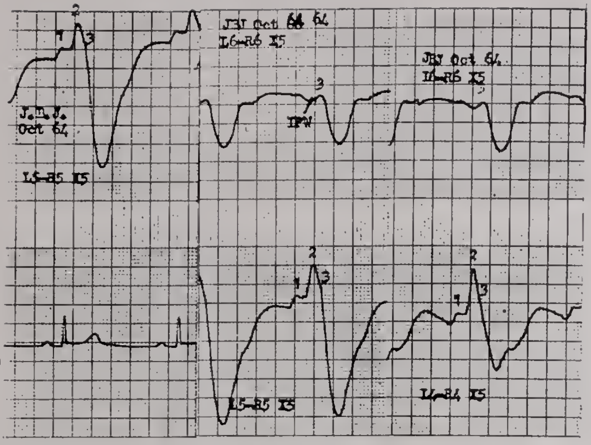

Fig. 5. The LV volume curve presents an extremely variable pattern, however it is recognized by its time-base in relation to other events. In these examples from left to right, the first is more frequently recorded over LV areas and is most typical. The upper tracings of the next two examples are more typical of the ventricular volume curve. In the same illustrations, the lower curves demonstrate the variable negative patterns that are recorded. The contour difference is due to lead position. The upper curves in the second and third examples show an initial positive wave with a duration of 0.10 seconds. This is fairly prolonged, and suggests some other hidden event. The lower tracings demonstrate what appears to be a continuous sweep from peak to sink. The negative onset of these curves begin simultaneous with the onset of the initial positive wave of the upper curve, but there is a slight noticeable jog at a time comparable with the onset of the negative deflection in the upper curve. Both upper and lower curves end at the same time point which is also the end of the EKG T wave.

Figures 2, 3. Diastasis follows in a variable pattern.

The initial positive deflection is commonly recorded but not always. On occasion a curve may be recorded with an early continuous negative sweep from the point of onset to the end of systole, Figure 5.

As stated before, the LV negative deflection begins about 0.18 seconds after the Q wave of the EKG. In leads over the LV area it ends between the peak and the end of the T wave. In other areas the onset may have the same timing but the end of negativity is abbreviated as though it were shut off, Figure 2. This may be due to a shift of the cardiac mass but is more likely representative of the overlap effect where ventricular events are distant from the focus of the given lead.

5. *The angular chest.* Low horizontal, transternal leads presumed well within the cardiac mass (L5-R5) should be expected to produce a ventricular volume curve. Occasionally this does not occur and instead the predominant curve is pulmonary in time and form, Figure 6. This is in the patient with an increased AP diameter and a sharp chest angle. It is postulated that the signal has missed the cardiac mass and picked up volume exchange from the base of the lungs. In this case attenuation was reduced to give an average sized curve which suggests the lead-effect distance involved.

6. *The pulmonary wave.* The pulmonary wave, as recorded in the horizontal transternal 2nd ICS, and elsewhere over lung tissue, is a peripheral type curve, similar in pattern to the carotid trace, Figures 2, 4. The resemblance ends here as noted by timing of events. There may be a corresponding onset but this is not a fixed relationship as the pulmonary wave is related to RV events. This curve is peripheral in type as it begins as a filling wave. Its initial peak may correspond closely with the peak of the C.T. There is a notch in the crest which times with the end of the systolic LV negative deflection. A second peak occurs which corresponds to the DN of the C.T. Following this, there is a flow-off wave which notches in the dichrotic limb at the time of the end of early rapid (passive) left atrial ejection. A positive wave occurs in the sink point which times with the jugular "a" wave.

7. *Relation to angiograms.* Just as a given lead demonstrates a curve pattern for specific events, it should relate to the angiographic position of the heart chambers involved.

Angiograms demonstrate that RV flow is essentially vertical along the left sternal border from the diaphragmatic level cephalad in an anterior-posterior direction, followed by a large volume in the pulmonary trunk and arteries. The LV flow is essentially posterior-anterior and on an angle which approximates a line from the left 5th ICS to the right 3rd ICS. A chest impedance plethysmogram from electrodes in this position will usually show maximum displacement of the third negative phase, which occurs during the time base of LV ejection.

I am particularly interested in the frontal plane areas as they relate to the intercostal space levels at the edges of the sternum. Here, in ascending order from the diaphragm, one may describe heart chamber positions in three layers:

1. Right atrium, right ventricle and left ventricle.
2. Left atrium.
3. Pulmonary trunk.

Although these chambers lie at variable anterior-posterior positions, there are two conditions which help to relate them to the intercostal

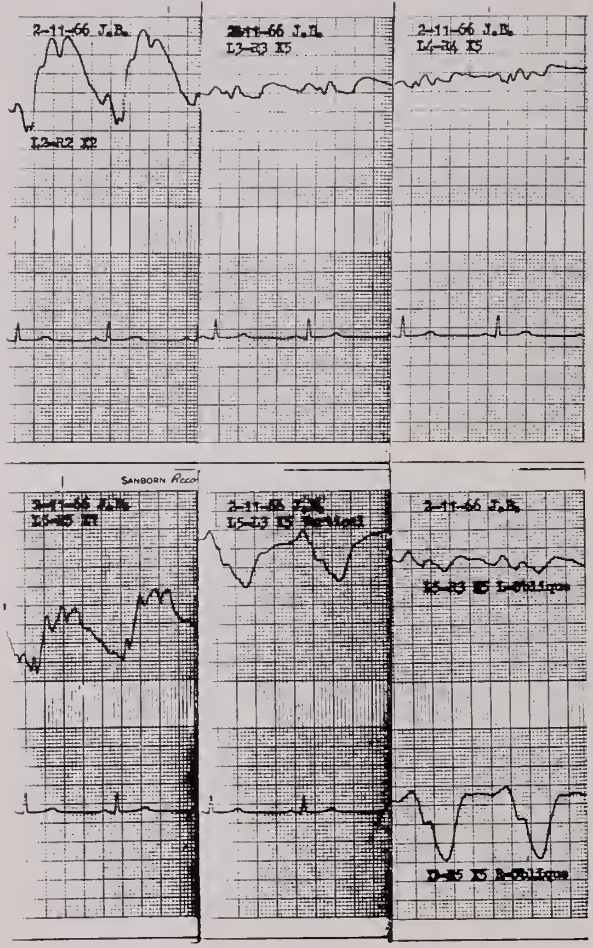

Fig. 6. The Angular Chest. These tracings are from a patient with a wide angle, increased AP diameter chest. Skin resistance 200 ohms (average patient 140-160 ohms). Attenuation (of L2-R2 and L5-R5) was reduced to better demonstrate these curves.

An extra-cardiac-mass pulmonary type tracing is to be expected in the L2-R2 lead, but not in the L5-R5 lead, where a chest x-ray places the electrodes well within the heart border.

A second phenomenon is seen in the oblique leads, where the LV displacement is greater in the right than in the left oblique lead.

spaces. The first condition is anatomical; the sternum slopes perceptibly posteriorly from the 5th to the 2nd intercostal space. The second is physical; this involves the relation between lead direction and the direction of the greatest velocity of flow.

In the first layer, the low velocity RV flow is close to the chest surface, with a vertical direction of flow from right to left. The posteriorly situated high velocity LV flow occurs in a semi-horizontal direction from left to right. Thus an L3-R5 lead would tend to be at right angles to maximum LV velocity, but fairly parallel to the direction of greatest RV ejection. Leads L5-R5, L5-R3, and L5-L3, approximate the direction of LV flow, and are also predominate to this ventricle because of the common electrode L5.

The left atrium seems to form a second layer, and varies in position from the 3rd to the 4th ICS, however it is seldom that an electrode in the 3rd ICS at the left sternal border does not demonstrate a phase 4 negative wave regardless of the position of the other electrode.

The third layer, or the pulmonary trunk divides into the right and left pulmonary arteries at a point between the aortic arch and the left atrium. There is a fairly large volume in this chamber, and the greatest direction of flow is horizontal. Lateral angiograms seem to relate the second intercostal space fairly well to this chamber, and a horizontal plethysmogram lead in this position usually demonstrates a good pulmonary curve.

8. *Relation of phase periods to lead position.* It is apparent from previous description that four time based negative deflections may be recorded, Figure 2. Also, it is evident that each phenomenon is most distinct in a given lead. Phase 1 seems to be present in all leads. Phase 2 is more prominent in the upper cardiac mass horizontal lead, and in the right oblique.

Further discussion returns us to the "initial positive wave." It is easily noted that the duration of this wave from onset to peak varies considerably. Its time base also varies, and when two simultaneous leads are recorded, instances occur where the peak of the initial positive wave in one lead coincides with the onset in the other, Figure 5. Hence, it is possible to record an *early* and a *late* initial positive wave. This would lend credence for defining number 2 as an RV event.

Phase 3 usually has the greatest displacement, and is recorded almost routinely in the lower horizontal, left oblique, and left vertical leads, Figure 2. There is an interesting point to be examined here. In these paired leads, there is a common electrode at the left sternal 5th ICS; L5-R5, L5-R3, and L5-L3. By comparing the amplitude deflection of the 3rd negative phase in these leads, it is noted that the direction of the greatest velocity is indicated.

While the LV wave is commonly preceded by an initial positive wave, there may only be a slight jog or change in angle of deflection to indicate the onset as separate from the RV wave, Figure 5. This condition is frequent in leads where the electrodes cover more than one

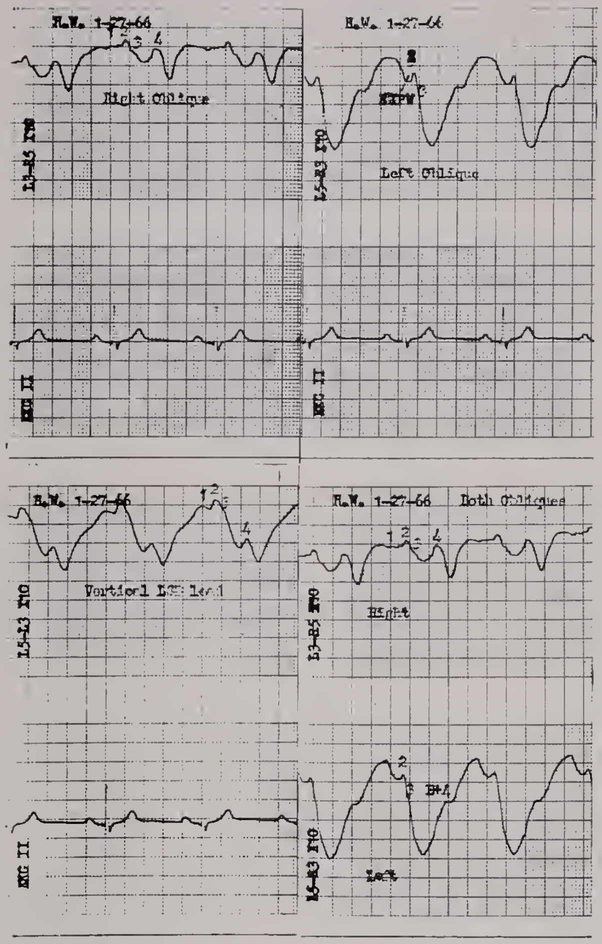

Fig. 7. The oblique curves are very significant. Usually the left oblique (L5-R3) demonstrates greater LV displacement than other leads. It is also more devoid of left atrial and right ventricular effects. The right oblique (L3-R5) tends to be the opposite. This is the more frequent recording but the reverse occurs—see Fig. 6. Of the four examples the left sternal border vertical tracing helps to orient these time-based events.

chamber layer, as in the vertical and oblique placements. Simultaneous multiple lead recording can be helpful here.

Phase 4, as a negative deflection, usually shows its greatest displacement in the upper cardiac mass horizontal lead but may be prominent in the left vertical, right oblique, and even in the lower horizontal tracing. In the latter lead there is more frequently a time based positive deflection suggesting ventricular filling rather than atrial volume loss. The phase 4 deflection may also be recorded with an early end-point when it is due to overlap; however, it is sharp and repetitive in leads where it occurs as a proximate effect. Here the end-point correlates with the late dichrotic notch of the pulmonary curve.

The pulmonary curve as an extra cardiac event is thus described because this upright tracing occurs during the expected time base of pulmonary flow, and is recorded most prominently by a horizontal lead above the actual cardiac mass. Also its identity is aided by event comparison with cardiac mass leads, and by the noted physical attenuation of the same time curve when recorded over more parenchymal portions of the lung.

conclusions

Certain possibilities are obvious from the data observed in this study. It seems evident that the electrical impedance plethysmograph curve describes volume exchange, and that selective lead positions identify individual chamber events. Particular effects are of special importance:

1. The relation of a lead to the heart chamber curve which it describes.
2. Indication of greatest LV velocity direction from the common electrode curves.
3. The extra-cardiac mass lead which relates to pulmonary arterial flow.
4. Identification of left atrio-ventricular volume relationship during the period of early rapid (passive) volume exchange.

While a great number of cases were examined, they are insufficient for statistical analysis, and this was not the purpose involved in the study. However chance alone cannot explain the repeated occurrence of proportional changes as they relate to electrode positions over the chest. In the patient with normal cardiac function and average chest diameter, the recorded curves will be similar, with contour variation dependent upon the shape and rotation of the heart.

It is believed that a fixed electrode arrangement can be derived whereby any heart position or condition may be subjected to analysis of functional changes. This will involve rapid or automatic lead switching to record all leads while the diaphragm is at the same level, and a means of maintaining or controlling exact electrode distance.

There are many reasons for the pursuit of indirect evaluation of cardiac function. This method suggests a positive approach to the problem. The technique is not difficult, and there is no trauma or discomfort for the patient. ■

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abstracto

Este es un estudio de observación de cambios en curvas de desplazamiento obtenidas por el pletismógrafo de resistencia eléctrica, de posiciones multiples en el pecho. Eventos cardiacos se identifican por el tiempo en que ocurren las deflecciones repetidas durante la sístole y la diástole. La forma de la curva depende enteramente en el intercambio de volumen registrado por una guia dada, y por la relación de la guia con la cavidad cardiaca dada. Asi que el trazo puede variar entre la curva clásica de volumen ventricular y la curva que representa función auricular.

Deflecciones en cuatro tiempos relacionadas con eventos cardiacos conocidos, son mas claras en trazos específicos. Estas son posiciones claves para el estudio de la función cardiaca. Una guia especial separada de la masa cardiaca, aisla el intercambio del volumen pulmonar de los eventos cardiacos.

Es aparente que estas guias del pecho proporcionan una curva descriptiva reproducible de eventos cardiacos normales. Aquellos que han encontrado tiempo e interés para observar otros indicadores indirectos de función cardiaca apreciarán el detalle físico dado por este método.

Psychotherapy for the Neurotic Patient

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The question of whether or not a physician who does not specialize in psychiatry should do psychotherapy, depends upon his personal interests in this area. The psychotherapeutic approach is based primarily on the relationship between the physician and his patient, but the physician's role can be not only to elicit information, but to guide, direct, and help his patients achieve new ways of dealing with life situations. The physician must constantly insist that there are ways of attempting to change habit patterns and that the patient must continue these attempts to find new ways to do things.

The principles discussed here apply to psychotherapy in general. An attempt is made to be as practical and specific as possible. We have been criticized for failure in post-graduate educational attempts. The criticism is that psychiatrists, in talking to other physicians about psychotherapy, spend a great deal of time pointing out what should *not* be done and in indicating that a good deal of sensitivity is necessary on the part of the psychotherapist, without ever really getting down to cases as to what actual activities should constitute the psychotherapeutic process.

No one has said it better than Greengold:[1]

> Presumably an evangelist's most satisfying work may lie in bringing the gospel to the healer. If this be your need, go ye to the surgeons or the allergists. But if you administer to *our* congregation (we do accept the savior and a *few* of the saints), come prepared to initiate us into some of the mysteries. If psychodynamics cannot be explained in a lecture series, please stop inviting us to attend. Don't tell a large group of us that small groups are better. Don't tell us from the rostrum that only guided patient care can be effective. If significant psychotherapy cannot be practiced without a three (not four, not two) year's rite of passage, if our ill patient can be treated only by five (not one, not seven) visits weekly, just give us your phone number and sit down. No more—no more prattling on the art of medicine. The art of medicine antedates formal psychoanalysis by several millenia. You may use rapport in your work, but—you are not the sole inheritors or interpreters of the bedside manner. If you come as artists we shall be happy to listen, even as we would to a physician, neurologist, or pediatrician. If you come as psychiatrists, bring your tools.

To deal very specifically with these problems of psychotherapy, I should like to consider them in a series of answers to fairly practical questions.

Should the non-psychiatrist deliberately do psychotherapy?

This immediately raises the question of whether or not all physician-patient relationships are not actually psychotherapeutic and, of course, they are. The question is not whether the physician should attempt to be helpful in his relationship as, of course, he should; but whether he should label what he is doing, "psychotherapy" and make a deliberate attempt to use psychotherapeutic techniques to bring about a change in the behavior and symptoms of his patient.

No one can answer this question with a flat yes or no. Many physicians are uncomfortable when the therapy consists of nothing but talking or listening. No matter how much we tell ourselves that we recognize the value of psychotherapeutic techniques, many of us feel more comfortable when we are doing something to the patient. It fits the doctor's role much more comfortably than simply sitting still, listening, and attempting to modify behavior by a sort of long range operation.

The first step in answering the question, therefore, is to decide whether or not you are comfortable in this kind of relationship or whether you feel better if you are prescribing or engaging in some kind of manipulation which satisfies you that you are doing something.

Presented at the 75th annual meeting of the Idaho State Medical Association, Sun Valley, Idaho, July 7, 1966.

Dr. Branch is Professor and Head of the Department of Psychiatry, University of Utah College of Medicine.

Psychotherapy can be, and often is, combined with medication. But it is still necessary to know your own picture of yourself as a physician. If you can feel like a physician and do formal psychotherapy, you should.

What do you actually try to accomplish with psychotherapy?

This, as for any therapy, will depend upon the nature of the problem. But speaking of the neurotic patient, who presumably can be expected to benefit from psychotherapy, what one tries to accomplish is the following:

1. Get the patient to try to understand what is actually the problem, not just his initial statement of the situation. For example, the problem may be: why is a lifelong difficulty intolerable now?

2. With the patient, try to understand why ordinary methods of dealing with human difficulties have not worked in his case. It should be noted that patients on whom psychotherapy is attempted have already exhausted the standard social methods of dealing with their problems. They have poured out their woes to bartenders or obtained relief from talking to spouses or friends, they have gained support from groups, they have developed new hobbies and skills, and in spite of all these activities, they are continuing to suffer from their neurotic symptoms. It is essential to try to understand why they have tried, and to try to understand why some of these procedures have not worked.

3. It is essential to attempt to ascertain what behavior patterns should be changed and what is the best possible approach for making these modifications. Traditionally the uncovering techniques, used in most psychotherapy, have to do with helping the person to understand why his neurotic behavior exists, on the assumption that once he understands this he will, himself, be able to change his behavior. Actually, some kinds of behavior can be most efficiently changed by admonitions, reassurance, persuasion, or environmental manipulations, even though these are regarded as rather low on the psychotherapeutic-status totem pole.

Does the psychotherapist have to be psychoanalyzed or in some way iron out his own personality difficulties before he can do successful psychotherapy?

In my opinion, detailed exploration of one's personality is not essential, but the psychotherapist must be sufficiently aware of his own personality to recognize the fact that he may have some needs which he can satisfy only at the expense of his patients. The psychotherapist who may be having difficulty with a nagging wife in a marital situation, for example, may find himself obtaining vicarious pleasure from hearing a person explain how he has successfully bested his wife in a situation of this sort, or a psychotherapist who has difficulty with authority figures, may obtain a certain amount of vicarious pleasure from hearing a patient discuss his rebellion against his stern parents. When the psychotherapist finds that he is keeping patients on these roads to the exclusion of other areas, he should realize that he has more than an impersonal interest in this area of human activity. Similarly, the psychotherapist may gain some insight into his own personality by noticing which patients fatigue him, bore him, make him angry, please him, or in other ways produce a subjective response of some kind. These responses are not necessarily harmful; but it is well for the psychotherapist to take note of the fact that they do occur, so that he can gauge his interview with the patient accordingly.

How can one work a psychotherapeutic schedule into a busy office practice?

There can be no specific answer to this question. Much depends upon the nature of the practice and the intensity of the physician's desire to do psychotherapy. Certain requirements do exist. There must be privacy, adequate soundproofing, and interruptions should be kept to a minimum and carefully explained to the patient in advance. If these cannot be handled during the ordinary working day, it may be useful to set aside certain parts of the week for psychotherapy. There is nothing sacred about the 50-minute hour and any physician should be able to do adequate psychotherapy in 20-to-30-minute interviews. An ideal situation, of course, is to modify the length of the interview in terms of the patient's needs and the nature of the material which is being discussed. Adolescents quite often do better in a shorter interview. Similarly, the frequency of interviews per week is not according to any sacred ritual but in terms of the patient's needs. Adequate psychotherapy can be carried out in half-hour interviews once a month. There may be times, however, when more frequent interviews are necessary, and the physician should be prepared to provide these.

Charges for psychotherapy are sometimes difficult for many physicians and one must examine his own attitudes. If, as noted above, one feels uncomfortable because the charge for the psychotherapy hour does not seem to be worthwhile since "I did nothing but talk," it would be better not to try formal psychotherapy at all. On the other hand, a psychotherapist must be able to feel that the procedure has been of some value to his patient, and under such circumstances, charging for this procedure is simply a matter of course like charging for any other. Patients are actually much less embarrassed about this situation than are many beginning psychotherapists.

When can one be sure that psychotherapy should be terminated?

This again is a matter of judgment and is precisely analogous to the same kind of decision applied to medicine in general. No patient is ever treated until all existing pathology has disappeared. Usually what happens is that the physician deals with acute episodes or he and the patient agree that they have reached a point at which further treatment is simply not worth the time or trouble. The same criteria can be used in psychotherapy. Some patients have entirely unrealistic expectations of therapy. Knight has said, "It is unfair . . . to anticipate that after being treated . . . [the patient] will become a paragon of all the virtues and accomplishments . . . one might as well suspect that psychoanalysis would also cure his freckles, his bad golf swing and his aversion to turnips."[2] Certainly, at some point the psychotherapist and the patient agree that the patient's time is more profitably spent on the golf course or at home than in the psychotherapist's office.

In connection with this, note also that it is unrealistic to expect that the termination of psychotherapy will necessarily mean that the physician will never see the patient again for that or any other condition.

As to the actual techniques, there is a growing feeling that insight therapy is probably less useful than is sometimes thought. The standard dramatic presentation of psychotherapy quite often suggests that some sort of blinding insight makes a patient recognize a connection between early life experience and his present neurotic pattern, and this insight itself is sufficient to alleviate the difficulties. In most psychiatric practice, however, the patient gains more from the relationship with the psychotherapist and the encouragement by the psychotherapist to find new ways of solving problems than from any real insight. Even if insight is obtained, there is still the tiresome relearning which must be undertaken before new habit patterns can be developed.

Perhaps a case report of a patient still under treatment will be useful in illustrating some points mentioned above.

CASE REPORT

This 35-year-old woman is married to a professional person in a technical field, is the mother of two small adopted children, has had two years of college, is a non-Mormon living in a highly Mormon community, and is in good physical health. She was referred because of a tremendously incapacitating hypochondriasis which, at the time I saw her, was focused on pigmented moles, many of which she had had removed and many of which she carefully watched for signs of increase in intensity of the color or size. She actually had cardboard cut-outs for the more prominent ones, placing patterns over the moles from time to time to be sure they had not increased in size. She was convinced she was dying of cancer and lived in a constant state of fear lest an irritation of some of the moles would lead to the development of a malignancy.

The referring physician explained to her that this condition required a psychotherapeutic approach and with her high level of intelligence, she could see immediately that intellectually she realized that her fears were groundless, but since she could not shake them off, some sort of psychic difficulty must be at the root of the problem.

The psychotherapist spent the first two to three sessions discussing her fears with her, her habit patterns with reference to them, the amount of investigation she had had, her inability to reassure herself adequately and along with this, the total life situation in which she found herself. It may be worth noting that after these first few sessions the discussion about the pigmented moles disappeared completely, although during one visit she announced with every evidence of terror that she had felt some vertigo and was convinced she had a brain tumor. On another occasion she had discovered a small lump in the breast which she felt was undoubtedly cancer. On both these occasions the psychotherapist immediately suggested that suitable examinations be performed and in both instances, this acceptance of her fear as being worth exploration was sufficient to relieve her anxieties. Physical examinations were done for the breast disease and proved to be reassuring to her.

Although she was popular when in school, she was convinced that she was quite likely to be the last leaf on the family tree. When her husband courted her, she found herself very grateful for these attentions, and with surprising lack of sophistication, married him. He turned out to be a gentle individual whose highly specialized field made it impossible for him to move from place to place with any facility and he now found himself at something of a dead end in the academic world, isolating her and himself, as Gentiles in a Mormon community, in which they find making friendships somewhat difficult.

She finds herself hating him for his inability to impregnate her, hating him for his inability to progress in his field, thinking of him as a failure and at the same time hating herself for not recognizing how lucky she is to have any husband at all and certainly this man who, for all of his defects, is a fine, gentle and very tolerant individual.

Psychotherapy then was directed at two things: the attempt to discover what underlying hostilities might be responsible for her preoccupation with a cancerous death which she felt was her lot, and an attempt to help her understand that her life was not in a blind alley and that there were many things she could try to do to broaden her horizons, cope better with the situation, and improve her satisfaction with living.

While continuing to explore with her her feelings about her husband and about living in general, the therapist was able to persuade her to go back to college and to make plans for a career which would be open to her in the field of psychology after acquiring adequate training.

In the course of this encouragement it developed that she had a specific pattern of forcing people to treat her as a little girl, patting her on the head when she did not do well and thus relieving her from any responsibility for really taking the initiative and dealing with her problems. She was further encouraged to broaden her social horizons in the community in which she lived. She has since achieved considerable satisfaction from organizing a dinner club of people with interests similar to those shared by herself and her husband, with the result that she has acquired a circle of interesting and warm friends. Her acceptance by the people in her classes has worked constantly at helping her get away from her feeling of worthlessness.

In all this the therapist has played several roles, from recommending tutoring to help her through difficult classes in statistics to attempting to deal with dream material and with childhood experiences which contributed to her general feelings of unworthiness.

This case was chosen because it is not terminated and cannot be regarded as a successful case in any sense of the word. It does illustrate, however, how the therapist must be prepared to give advice when indicated and, when he feels sure of his grounds, prepared to guide, support, and reassure when appropriate. He must, at the same time, be prepared to deal with historical material and with various feelings as they emerge in the discussion of life's problems. ■

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abstracto

La cuestion que si el medico que no se especializa en psiquiatría debiera practicar psicoterapia o no, depende en el interés que él tenga en este campo. El tratamiento psicoterapeútico está basado primariamente en la relación entre el médico y el paciente, pero el papel del medico no debe ser solamente para obtener información, sino para guiar, dirijir y ayudar a sus pacientes a aprender nuevas maneras para afrontar situaciones en la vida. El médico debe constantemente insistir en la existencia de maneras, de tratar de cambiar habitos establecidos y que el paciente debe continuar esos atentos para encontrar nuevas formas de hacer algo.

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Reaction to Implanted Suture Material

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Six suture materials were implanted subcutaneously in each of 15 dogs. Five of the resulting scars were excised after 72 hours, five after six days, and five after 30 to 200 days. Dacron and plain catgut stimulated the least reaction. Impregnated Dacron and silk were comparable as were chromic extruded collagen and chromic cutgut.

Search for the ideal suture material continues, and manufacturers have provided the surgeon a wide variety from which to choose. Recently, two new suture materials came on the market. These are Teflon impregnated Dacron (Tevdek), and extruded collagen, processed from deep flexor tendons of cattle.

Impregnated Dacron is said to have the same handling properties and tensile strength as Dacron. Because of its Teflon impregnation, it is claimed that the new material incites less tissue reaction than either silk or Dacron (Mersilene). On the other hand, the new absorbable suture (extruded collagen), as compared with catgut, has been praised for its better handling and knot tying properties, greater tensile strength, and pliability.[1-2] In clinical use we have observed the same favorable characteristics. The properties of these two new suture materials would make them, on clinical grounds, an ideal pair for surgical use.

It is the purpose of this report to compare the tissue reaction, in dogs, of impregnated Dacron with Dacron and silk, and extruded collagen with catgut. Both plain and chromicized catgut were used in comparison of absorbable suture materials.

method

Adult mongrel dogs were anesthetized using 30 mg per kg body weight, of sodium pentobarbital intravenously. Implantation sites chosen were either the neck or abdomen, or both, and were prepared by clipping the fur and painting the area with providone-iodine (Betadine) solution. The six different types of suture material were implanted subcutaneously in six separate incisions in the same animal. Therefore, each dog served as his own control. Three groups of dogs were used, each group composed of five dogs. The first group had the suture implants harvested after 72 hours, the second group after six or seven days and the third group after 30 to 200 days. The implants were harvested by excising the whole scar. Any implant with evidence of gross infection was discarded and the suture re-implanted in a different location in the same animal.

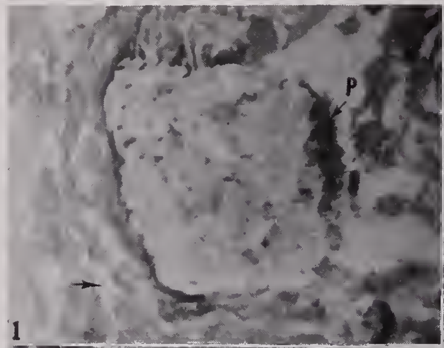
The tissues were fixed in formalin and sections made from the area of maximum reaction. The sections were then examined microscopically for tissue reaction, taking into consideration the amount of edema, hemorrhage, depth and concentration of polymorphonuclear and lymphocytic infiltration, fibroplastic proliferation and the amount of fibrous encapsulation, (Figures 1-5). Degree of tissue reaction was graded as either mild, moderate or marked. Grading of tissue reaction was agreed upon by the authors and confirmed by a consultant pathologist.

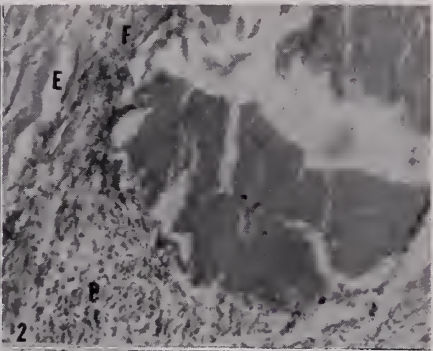
results

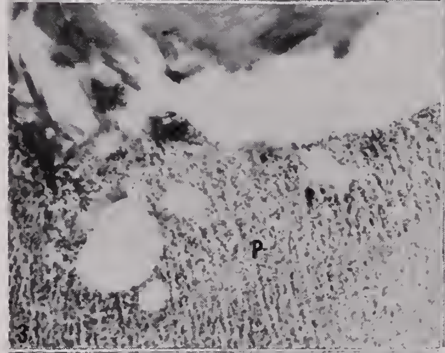
Acute group. Results are shown in Table 1. Both the absorbable and the non-absorbable groups have essentially the same number showing mild, moderate and marked reaction. In the non-absorbable group, three silk implants had marked reaction as compared to one each of the impregnated Dacron and Dacron implants. Dacron seems to stimulate less reaction than impregnated Dacron. In the absorbable group, three chromic catgut produced marked reaction as compared to one each of chromic extruded collagen and plain cutgut. Plain catgut stimulated less recation than the other two absorbable sutures.

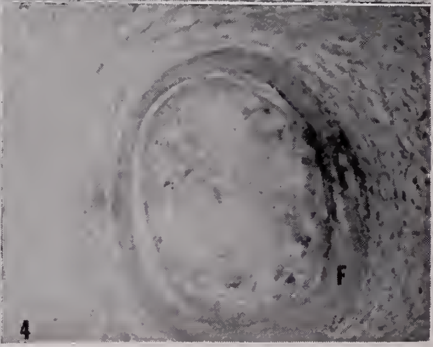
Intermediate group. Results are shown in Table 2. Nine implants in the non-absorbable group had marked reaction as compared to five in the absorbable group. Among the non-absorbable sutures, Dacron produced the smallest number of marked reactions and the most with mild reaction. Silk and impregnated Dacron are about the same. Among the absorbable group, plain catgut seems to produce the least tissue reaction. More implants of chromic extruded collagen induced a marked reaction.

Chronic group. Results are shown in Table 3. The absorbable and the non-absorbable groups cannot be compared, since most of the absorbable suture implants were absorbed. It is quite interesting to note that rates of absorption of absorbable materials were quite erratic. Plain catgut was still present after 33 days in one dog and chromic catgut was still present after 50 days. Two implants of chromic extruded collagen were present after 30 days.









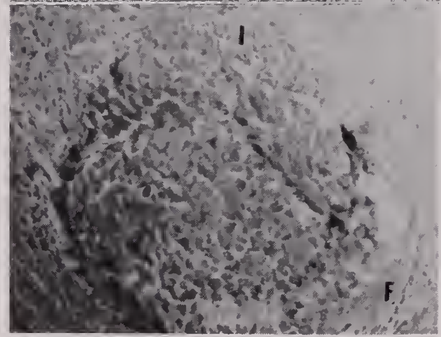


Fig. 1. Dacron suture after 72 hours shows mild reaction. There is minimal inflammatory reaction -P- but a significant amount of edema—arrow. X-200

Fig. 2. Chromic catgut after seven days shows moderate reaction. P-polymorphonuclear infiltration. E-edema. F-fibroblastic proliferation. X-200

Fig. 3. Extruded collagen suture after seven days shows marked reaction. P-polymorphonuclear infiltration, much more extensive than in Fig. 2. X-200

Fig. 4. Dacron suture after 30 days. Mild, chronic reaction but no acute inflammatory process. F-fibrous encapsulation. X-200

Fig. 5. Silk after 33 days. F-minimal fibrous encapsulation. I-acute and chronic inflammatory cell infiltration. This is marked, chronic reaction. X-200

Table 1

Acute Group 72 hour implants

	Non-Absorbable			Absorbable		
Reaction	Tevdek	Mersilene	Silk	Extruded Chromic Collagen	Chromic Catgut	Plain Catgut
Mild	1	2	1	1	1	2
Moderate	3	2	1	3	1	2
Marked	1	1	3	1	3	1

Table 2

Intermediate Group 6 and 7 day implants

	Non-Absorbable			Absorbable		
Reaction	Tevdek	Mersilene	Silk	Extruded Chromic Collagen	Chromic Catgut	Plain Catgut
Mild	1	2	0	1	1	2
Moderate	1	1	1	1	2	2
Marked	3	2	4	3	1	1

Table 3

Chronic Group (over 30 day implants)

	Non-Absorbable			Absorbable		
Reaction	Tevdek	Mersilene	Silk	Extruded Chromic Collagen*	Chromic Catgut**	Plain Catgut***
Mild	2	1	0	0	0	0
Moderate	2	4	4	0	2	0
Marked	1	0	1	1	0	1

*No suture seen in 4 implants
**No suture seen in 3 implants
***No suture seen in 4 implants

Among the non-absorbable group, the three suture materials in the study were comparable, but there were more silk implants with severe and moderate reaction.

comment

Narat, et al., reported that the intensity of tissue reaction to Dacron, cotton, silk, and catgut, implanted in the abdominal wall of rabbits, is approximately equal.[3] Brit, et al., have reported on the superiority of Dacron to silk, when implanted within the heart of a significant number of dogs, as indicated by the lower incidence of thrombus formation and less intense reaction.[4]

Our results seem to indicate that, among the non-absorbable sutures, Dacron induced the least tissue reaction when compared with impregnated Dacron and silk in the short term implants (72 hours to 6-7 days). However, in the chronic implants, the three sutures were comparable. In the absorbable group, there was a tendency for plain catgut to produce less intense reaction than either chromic collagen or chromic catgut. However, these results are based on a relatively small group and no statistical validity can be ascribed to the results. Secondly, although we excluded all implants that looked infected on gross examination, microscopic examination in some of our specimen showed marked, acute, inflammatory reaction with suppuration.

conclusion

In dogs, impregnated Dacron and chromic collagen are comparable to popular counterparts among non-absorbable and absorbable suture materials. Dacron and plain catgut seemed to produce less intense tissue reaction. ■

676 Shoup Avenue West (83301) (Dr. McKain)

abstracto

Seis materiales de sutura fueron implantados subcutaneamente en quince perros. Cinco de las cicatrices resultantes fueron escindidas después de 72 horas, cinco después de seis días y cinco después de 30 a 200 días. Dacrón y catgut simple produjeron la menor reacción. Dacrón impregnado y seda fueron comparables, así fueron también colágen formado crómico y catgut crómico.

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Infectious Mononucleosis with Hemolytic Anemia in a Patient Suspected of Having Systemic Lupus Erythematosus

CALVIN ZEN, M.D., Hartford, Connecticut
FRED K. VIREN, M.D. / TED E. LUDDEN, M.D., Spokane, Washington

A patient with infectious mononucleosis, acute hemolytic anemia, hepatitis, and some clinical and laboratory features of systemic lupus erythematosus is reported. Laboratory studies support the proposition that a pathologic immune response is the etiology of the hemolytic anemia.

In 1943 Dameshek first described a case of infectious monolucleosis with hemolytic anemia.[1] There have been approximately 30 similar cases described subsequently.[2-5] The patient being reported had hemolytic anemia with infectious mononucleosis and is unique in that he presented findings suggestive of systemic lupus erythematosus.

Hemolytic anemia as a complication of infectious mononucleosis is infrequent. It occurs in about ten per cent of patients with systemic lupus erythematosus.[6]

Several mechanisms have been postulated as to the pathogenesis of the hemolytic anemia in infectious mononucleosis, including drug reaction, viral action on erythrocytes, and an immunologic reaction. The most accepted mechanism is an immunologic reaction.[2,3]

CASE REPORT

A 28-year-old white male truck driver was admitted to the Deaconess Hospital, Spokane, Washington, on November 22, 1965, because of malaise, anorexia, fever, and lymphadenopathy of ten days duration. Temperature was 101 F. The skin and sclerae were slightly jaundiced. The cervical lymph nodes were markedly enlarged. The liver extended eight centimeters below the right costal margin and was tender. The spleen tip was palpable at the left costal margin, but not tender. There were no petechiae on the mucous membranes of the mouth or skin, and no other unusual manifestations were noted on physical examination. Laboratory findings are in Table 1.

The patient received no medication during the first four days of hospitalization. During this time he ran an intermittent low grade fever. There were no appreciable changes in the size of the lymph nodes, liver, or spleen. On the second hospital day he complained of acute pain in the left shoulder which had intermittently manifested itself in the past few years. The patient began feeling better on the third hospital day and his appetite returned. On the fifth hospital day he was given 2 cc. of Decadron intramuscularly every eight hours for three doses. The lymph nodes and liver diminished markedly in size. The patient felt completely well on the seventh hospital day and was discharged on a tapering corticosteroid dose over a six-week period.

comment

In Dameshek's 1943 case of acute hemolytic reaction associated with infectious mononucleosis, the hemolytic reaction followed sulfadiazine administration.[1] Dameshek found cold auto-hemagglutinins in his case. Cold hemagglutinins with infectious mononucleosis have also been reported by other workers.[3,5] It is difficult to attribute the hemolysis to cold agglutinins since no evidence of hemolysis at body temperatures is usually demonstrated.[7] No correlation has been shown between the titer of cold agglutinins and the titer of heterophil agglutinins.[3,5]

A pathologic immune mechanism seems the most likely explanation of the hemolytic anemia in infectious mononucleosis. The effectiveness of corticosteroid therapy supports this concept.[2,3,5]

It has been postulated that the hemolysis may result from the direct action of viruses on erythrocytes. Moolten and Clark have described a case of acute hemolytic anemia with viremia in Newcastle disease, but these authors did not attribute the hemolytic process directly to the viremia.[8]

It has been suggested that the enlarged spleen,

Table 1

Date	Nov. 22	Nov. 23	Nov. 26	Nov. 29
Hemoglobin	11.1			11.6
Hematocrit	33.0			33.5
Leukocytes	8820			9980
Segmented neutrophils	22			51
Band cells	2			0
Lymphocytes	70			45
Monocytes	4			3
Eosniophils	2			0
Basophils	0			0
Sedimentation rate (Westergren)			1mm/hr	
Bilirubin				
Direct	0.5			0.1
Indirect	2.1			1.2
Bromsulphalein retention (1 hr)	21			
SGOT	150			56
Thymol turbidity	5.9			14.2
Prothrombin time (%)	56			84
Alkaline Phosphatase (Bodansky u)	37			22
Heterophil Agglutinins		1:224		
After guinea pig absorption		1:112		
After beef cell absorption		No titer		
Latex flocculation			1:32	
VDRL			Negative	
Lupus erythematosus cells			None	
Anti-DNA titer			1:512	
Coombs' Test				
Direct			Positive	
Indirect			Positive	
Donath-Landsteiner Test			Negative	
Erythrocyte osmotic fragility			0.48-0.38	
Reticulocyte Count			3	
Serum iron		147		
Serum iron binding capacity		309		

characteristically seen in infectious mononucleosis, may play a role in the hemolytic mechanism by lysing erythrocytes damaged by viral antibodies.[2,3]

Thus the mechanism of hemolysis in infectious mononucleosis is not clearly defined. Although a pathologic immune response seems the most likely explanation of the hemolytic anemia, the exact mechanism of antibody formation and nature of the antigen stimulus remains unknown.

In our case infectious mononucleosis was confirmed by a positive Paul-Bunnell test. There was an associated hepatitis as indicated by abnormal liver function studies. Positive direct and indirect Coombs' test indicated the presence of circulating antibodies which may occur in both systemic lupus erythematosus and infectious mononucleosis. Cold hemolysins were absent.

The anti-DNA titer of 1:512 suggested the possibility of systemic lupus erythematosus,[9,10] but this could not be confirmed by lupus erythematosus cell preparations. A suggestive symptom of lupus erythematosus was the complaint of intermittent acute shoulder pain.

The positive direct and indirect Coombs' test on our patient support the immunologic mechanism of hemolytic anemia in this case. An immune mechanism is further supported by the anti-DNA reaction and the patient's response to Decadron. ■

Hartford Hospital 06115 (Dr. Zen)

abstracto

Un paciente con mononucleosis infecciosa, aguda anemia hemolítica, y algunos hallazgos clínicos y de laboratorio de sistémico lupus eritematoso es reportado. Estudios de laboratorio soportan la proposición de que una respuesta inmune patológica es la etiología de la anemia hemolítica.

references on page 168

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Just when the Soviets admit the virtues of the free market economy by trying to imitate some phases of it, our drive in the United States is perceptibly in the other direction—toward more government intervention in the market. Just when the Soviet leaders are making sheep's eyes at the market economy because they can see that direction by bureaucracy is no substitute for the flexibility of the free market—the United States substitutes government fiat for market forces in a number of vital areas.

This basic change has been taking place in the American free enterprise system practically unopposed by the American public or by important business interests.

The new system cannot be called government control because it has not gone quite that far. A fair characterization of this new arrangement would be to call it the Government Veto System. *The basis of the Government Veto System is direct action by the Administration to veto prices which it does not like in major markets in the economy. To be sure, this veto has been employed to date only in the case of "key" prices, but it has been proven time and again in the history of various countries that controls tend to breed still more controls. The objective which the controllers hope to achieve always proves elusive, whether it be in the control of commodity prices or of money. When the controllers are disappointed, their tendency is to blame lack of success on an insufficiency of power. So they ask for more controls and more power.*

Lawrence Fertig, The Freeman, November, 1966

Prevention of Sore Heels in Bed Patients

HARRY H. KRETZLER, JR., M.D., Seattle, Washington

Plastic heel protectors, as designed for use in athletic pursuits, have been used on bed patients for the prevention of sore heels at Northwest Hospital. They are economical, and are enthusiastically endorsed by patients and nursing personnel.

The problem of sore heels in bed patients has stimulated many approaches to prevention. The condition varies from merely a reddened, slightly abraded area to full-blown ulcers. Doughnut pads, tincture of benzoin, and many other means have been used to prevent or remedy this situation.

For the past several years I have used a plastic heel protector* to prevent sore heels, and allow the patient to move his leg more easily and comfortably. It was made primarily for the use of broad jumpers and other athletes who develop sore heels in their athletic pursuits. Figures 1 and 2 show the heel cup in place on a patient with a pelvic fracture.

The cup is made of a plastic that can be sterilized so that repeated use is practicable. As a rule, no tape or other material is needed to keep the cup in place, since the warmth of the foot tends to make the plastic mold and adhere to the foot. Usual foot hygiene and care are given, and the cups are not left in place continuously.

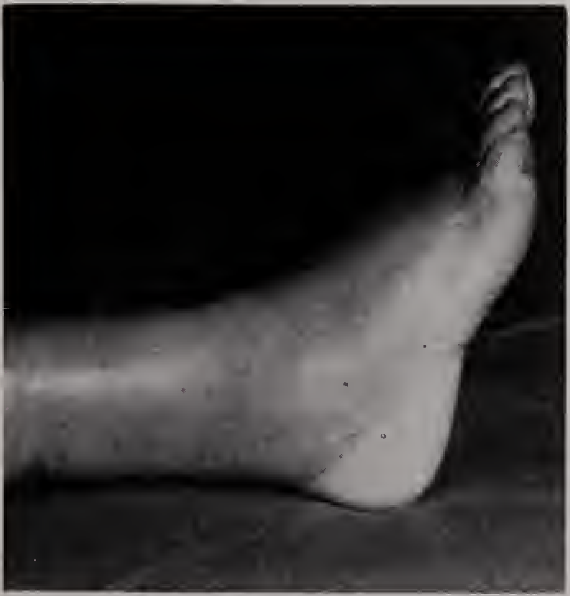

Fig. 1

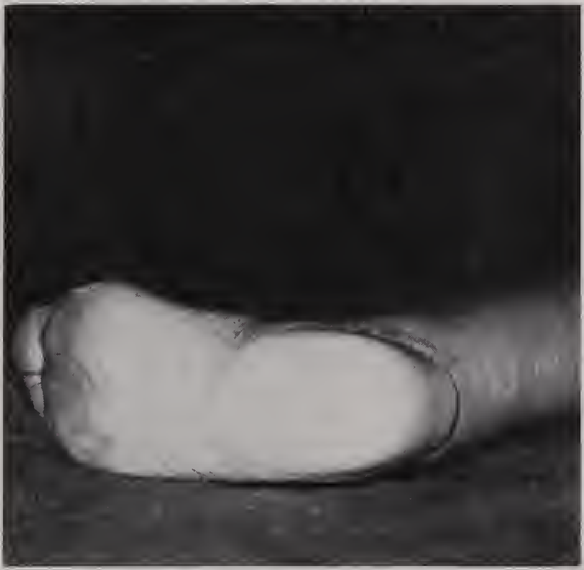

Fig. 2

Use of these heel protectors has received enthusiastic approval by the patients and the nursing staff at Northwest Hospital in Seattle, where they have been used. Many patients have asked to take the cups home when they are discharged. The nominal cost makes this feasible. No allergic reactions to the plastic have occurred at this writing.

It is the feeling of the patients and nursing personnel that the comfort of the bed patient is significantly improved by the use of these heel protectors. ■

1511 No. 200th (98133)

abstracto

Protectores plásticos de los talones, como aquellos designados para el uso en ejercicios atléticos, han sido usados en pacientes en cama para la prevención de talones dolorosos en Northwest Hospital. Estos protectores son económicos y su uso está entusiastamente recomendado por pacientes y las enfermeras del hospital.

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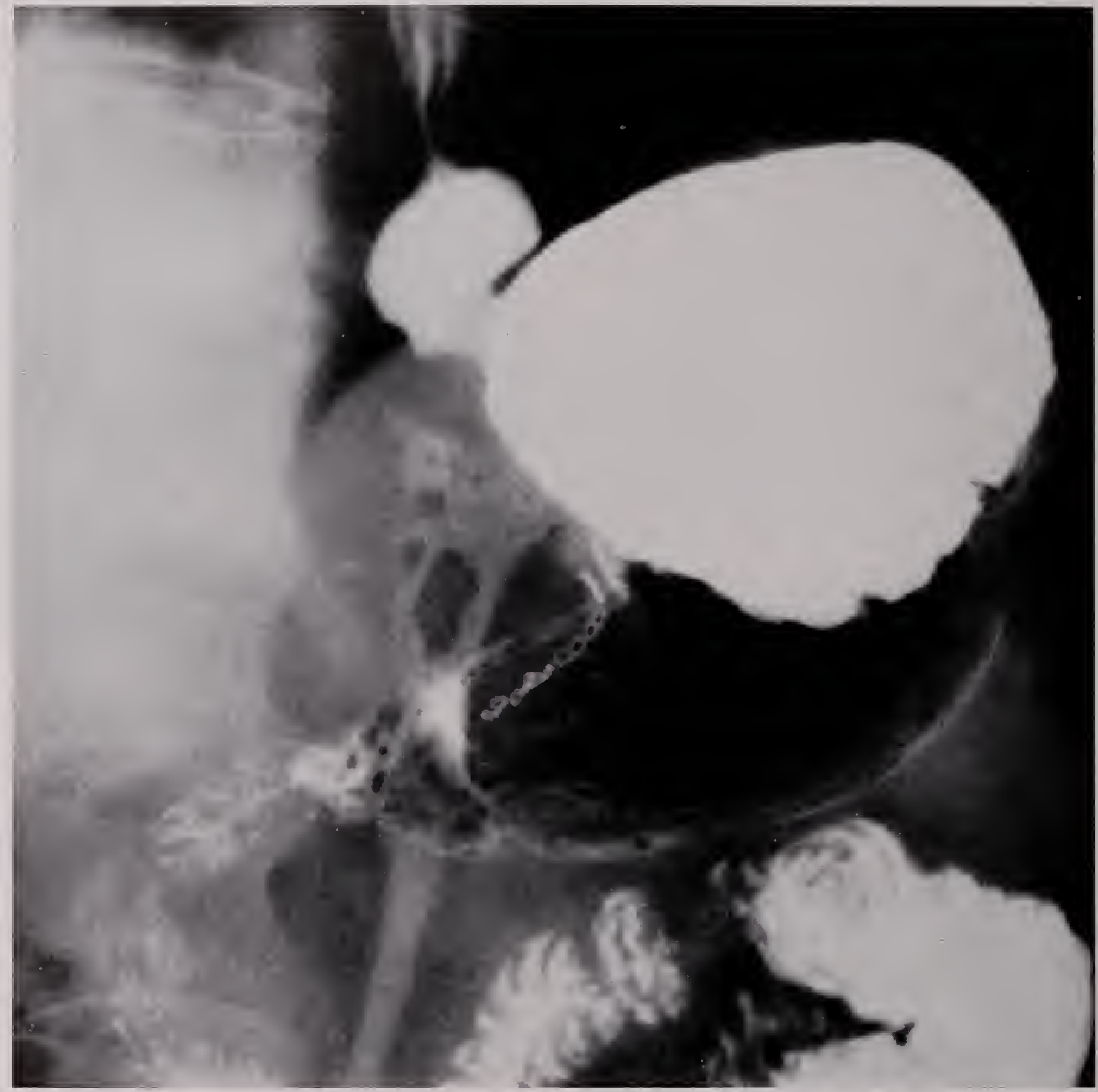
*M-F Heel Protector, M-F Athletic Co., Inc., Providence, R.I.

X-Ray of the Month



The x-ray film shown is a spot film taken during an upper gastrointestinal study of a 65-year-old white female. The patient was lying supine and rotated slightly to the right. The patient had a gastric resection with Bilroth 1 anastamosis for chronic duodenal ulcer disease approximately one and one-half years before the present examination. She was having no particular problem at the time of the examination.

Something of incidental interest is shown on the film.

See page 191

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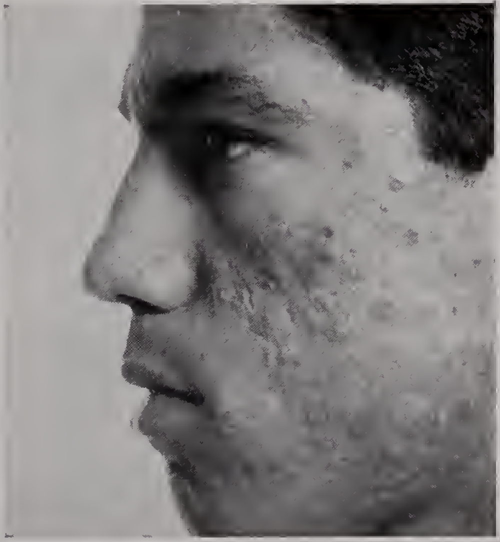

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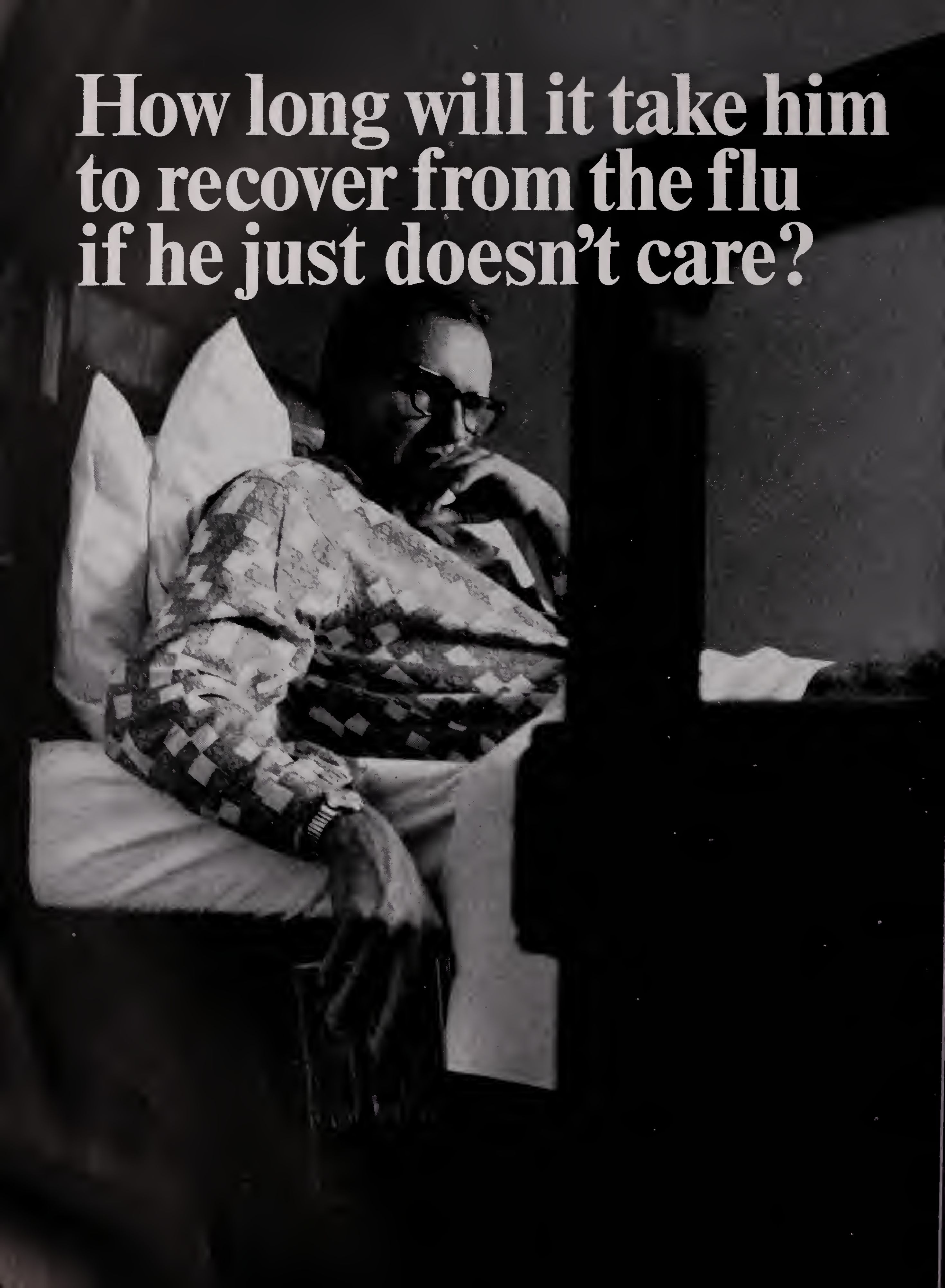
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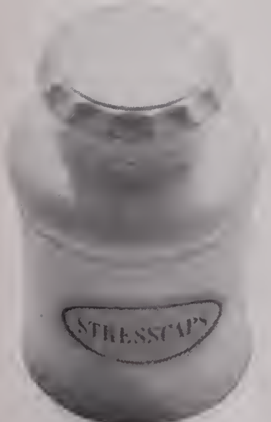

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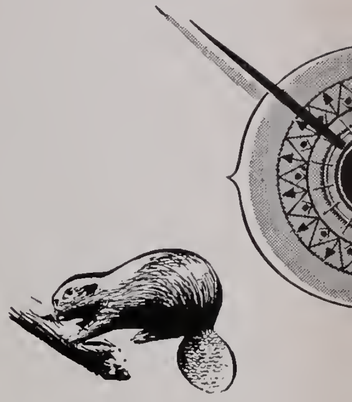

Oregon Medical Association—2164 S. W. PARK PLACE, Portland, Oregon 97205

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Asian Tour Offered OMA Members

A tour of the Far East is slated this spring for interested OMA members and their families. Under the auspices of the State Association but not an official function, it is being organized by James V. Harber of Portland.

Dr. Harber promises a "specially tailored far eastern trip for physicians at a reasonably leasurely pace, offering a substantial saving."

The 3-week trip, beginning May 5, includes stops in Japan, Taiwan, the Philippines, Hong Kong, and Hawaii, with unlimited stop-over privileges in Hawaii on the return trip.

Meetings with Asian physicians and visits to various medical facilities have been arranged, emphasis to be placed on those diseases most likely to appear in the United States as a result of increased international travel. Participants will also have the opportunity to see most of the major scenic, cultural, and entertainment highlights of the Far East.

Any interested party may contact Dr. Harber at 2266 N.W. Lovejoy Street, Portland (97210); or phone 223-2164 or 292-1666.

Twenty Doctors Receive Licenses

Twenty doctors have qualified for licensure to practice medicine and surgery or osteopathy and surgery in Oregon according to the Board of Medical Examiners after its regular meeting January 12-14, 1967.

Those who received licenses to practice medicine and surgery are: Larry Thomas Brice, Wilma Leonore Carson, Jan Michael Collins, John Stadler Corson, Richard Stuart Egan, Edward Lewis Korn, James Roderick McDougall, Gilbert Thomas Miller, Loren Paul Petersen, Clifford Evans Roberts, Jr., Gordon William Summers, and John David Webber, all of Portland; John Milton Geburtz, U.S. Navy; Arthur Alfred Hockey, Indianapolis, Indiana; Robert Nelson Page, Jr., Hillsboro, Oregon; Frank Alexander Walker, Salem, Oregon; Laurence John Wiwatowski, United States Air Force; John Lee Wobig, United States Public Health Service; and Robert Charles Wolgamott, Worthington, Ohio.

John Terence Dierdorff, Estacada, Oregon, received a license to practice osteopathy and surgery.

The Board of Medical Examiners will hold its next meeting April 13-15, 1967. Applications to be considered during the April meeting must be filed with the office of the Board no latter than March 13, 1967.

UOMS Postgraduate Education Courses, 1967

Basic Roentgenology of the Chest, scheduled for March 2 and 3 at UOMS, is one of several of Oregon's postgraduate courses planned for 1967.

The course will stress everyday problems relating to normal anatomy, pathology, and radiographic technic, and will be taught in small group-sessions.

Enrollment is limited and pre-registration is required. Tuition is $40. The course is acceptable for 13 hours of AAGP Category I credit.

Other postgraduate courses:

Review of General Surgery, 1967—March 9-10
Computers and Medicine—Is the Show Worth the Price of Admission?—April 27-28
Commonly Encountered Infections in the Obstetric and Gynecological Patient—May 27
Genetics in Medical Practice—June 15-16

OBITUARY

DR. MARY C. ROWLAND, *Salem, died August 1, 1966, at the age of 93. She was born in Alma, Nebraska. In 1910 she moved to Oregon, and settled in Salem in 1916 where she practiced until a few years ago.*

Dr. Rowland was a graduate of Women's Medical College, Kansas City, Missouri, in 1901. Cause of death was hypertension due to cardiovascular disease.

PRESIDENT'S *page*

JOHN E. TYSELL, M.D.

A Game People Play

There has been some discussion of the application of the democratic process to the development of medical policy and programs. At the recent AMA Congress on the Socio-economics of Health Care, Wallace S. Sayre, Professor of Public Law and Government at Columbia University, defined the system for the medical profession. He didn't itemize our weaknesses. He didn't need to.

Prof. Sayre defines the process as the "non-zero sum game" of decision making. It is a pluralistic, competitive system. It is good for the tender ego because nobody ever totally wins or totally loses, and nothing is ever finally settled. The political method consists of *bargaining* between competing centers of power. Without a commitment to bargaining, you are assured of defeat.

In this process the bargaining takes place between competing centers of power. Each power center possesses resources which are different and which vary from time to time. In entering a bargaining session the ultimate and alternate goals must be defined as well as the resources of each competing power center. The decision is always a compromise. This tends to make idealists unhappy with the system because all decisions are tentative, sometimes ambiguous. There is no final decision and the bargaining will continue or resume at a later time.

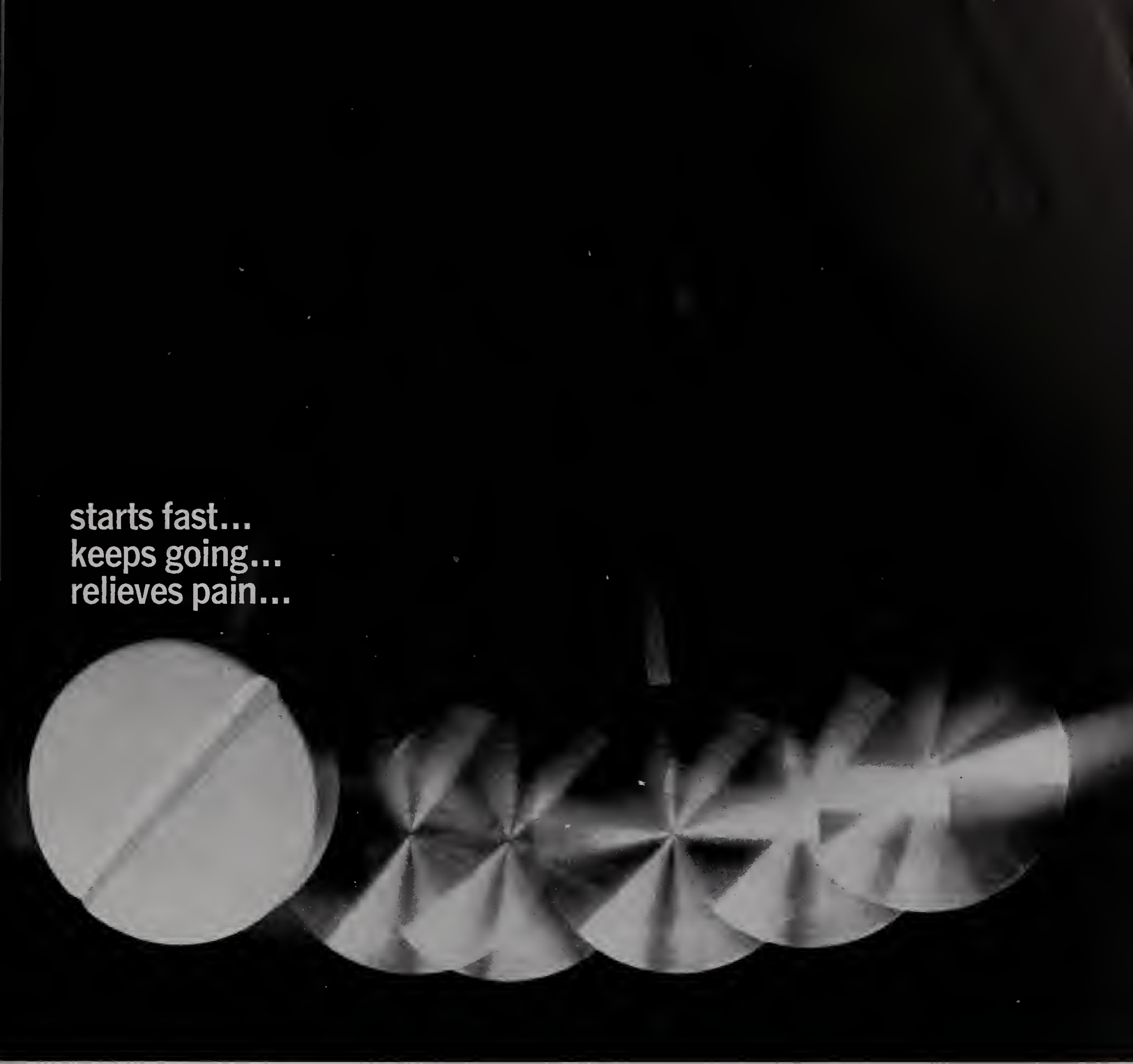
Winners, in their moment of partial victory, say this is a dynamic system influenced by civic groups. The losers say the system is being disrupted by pressure groups, and that the system is very irrational and unstable. However, the system has great strength and stability because of its resiliency. There are definite rules which may be learned. There is no likelihood that the "system" will be abandoned.

The health care sub-system of power in our government consists first of the executive branch and includes staff, cabinet members, and department heads. Second is Congress with its committee structure and particularly the sub-committees and their *permanent staffs*. The courts are third and relatively inactive in the health care power system. Fourth are the Bueaus: U.S. Public Health Service, Food and Drug, Social Security, and so forth, with their more or less permanent bureaucratic hierarchy. The political parties, which use causes as tools in acquiring power, are fifth. In sixth place, are the special interest groups. There are civic groups like the AMA and pressure groups like the AFL-CIO. The seventh embraces the communications media who tell what they *believe* each group is doing to the other. They try to be objective but are human and must have heroes and villains to survive in their own power system.

The great advantages of this system are competitiveness and openness, and it must retain both to survive and function. It does not have speed, high rationality, certainty, or clarity. Winston Churchill said, "Everybody knows that democracy is the worst possible form of government except for all known alternatives."

Thank you, Professor Sayre. This is the game as it is played. May all who wish to play, first learn the rules. ■

John E. Tysell M. D.



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Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

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WASHINGTON

Washington State Medical Association—1800 Terry Avenue, Seattle, Washington 98101

PRESIDENT *Lucius D. Hill, M.D., Seattle*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
annual meeting, September 10-13, 1967, Seattle

Washington State Physicians Give Opinions On Expansion and Extension of Medicare Programs

Seven Congressmen and two Senators from the State of Washington requested evaluation by physicians of propositions that are included in printed petitions they have been receiving from groups promoting the expansion of the Medicare program by passage of Medicare law amendments now before the Congress.

The Washington State Medical Association surveyed a representative random sample of physicians and received the information summarized here.

The propositions set forth in the petitions are first listed; followed by a Respondent's Consensus statement and Resume of Reasons on each of the propositions.

Proposition 1: Elimination of all deductible and co-insurance features of the Medicare Program, removal of waiting periods and deadlines for enrollment. Deductibles form barriers to needed care for those least able to pay.

Consensus: Physicians surveyed were unanimous in agreeing that the co-insurance and deductible features are an important part of the current Medicare program and should be maintained.

On removal of waiting periods and deadlines for enrollments, not everyone returning the survey commented, but a consensus here seems to be that the waiting periods and dealines are necessary for orderly administration.

Resume of reasons in support of maintaining co-insurance and deductibles:

1. The principles of co-insurance and deductibles were wisely borrowed from private insurance programs and provide benefits that are economically feasible and which are unlikely to be abused.
2. Elimination of deductible and co-insurance features would result in over usage of Medicare program with doctors' offices and hospitals more crowded than at present.
3. It is questioned that people are denied care who cannot afford the deductible or co-insurance.
4. The Washington State Department of Public Assistance is expected to ask the 1967 State Legislature for funds to purchase Part B of Medicare coverage for welfare recipients 65 and over, including full payment for deductibles and co-insurance.
5. The present increase of hospital utilization points up the need for some sort of deterrant to unrestricted hospital use—from the patient's point of view, as well as the physician's.
6. The cost of the Medicare program should be reviewed after the first year, before consideration is given to eliminating deductibles and co-insurance.
7. Many physician-sponsored pre-paid medical care programs in the State of Washington provide medicare recipients with insurance that covers the deductible and co-insurance features of Part A and B of Title XVIII of Medicare.

Proposition 2: Replacement of the 65 year age requirement for Medicare benefits by a provision qualifying all women at age 62.

Consensus: Reaction from physicians was mixed on this proposition, with several indicating they would favor lowering the age limit for women, but with a majority supporting the current age level.

Resume of reasons in support of 65 age requirement for women:

1. Physiologically and medically there is no differ-

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PRESIDENT'S *page*

LUCIUS D. HILL, III, M.D.

WSMA and the Legislature

In Governor Evans' state of the state message, only one voluntary organization was named. This was the Washington State Medical Association. This is indeed no accident. For some time, the WSMA has been working with Governor Evans through the Governor's Medical Advisory Committee and with republican and democratic leaders of the State Senate and House. In addition, WSMA is actually advising each of his departments concerned with health and welfare. Discussion with these agencies covers matters ranging from environmental control to delivery of physician services. Many members of our association have done a great deal of committee work leading to formulation of policy and sound advice, which is valuable in our conversations with the departments on both the local and state level. Mr. Richard Gorman, Executive Secretary of WSMA, and Mr. Harlan Knudson, Director of Public Relations and Legislative Affairs, have been working with each of these committees and with the state departments as well.

This expertise lends credence to the advice and counsel given by our association to all those working with us on health matters. Our staff, backed by hard working and knowledgeable committee members, has stood ready to advise the Governor, his departments and the Legislature on every health measure that has come into being in this state. This direction by our membership has resulted in more favorable implementation of health programs. Notable examples of achievement are in the areas of school health, traffic stafety, immunization programs, mental health, child welfare, frauds and quackery, and community health services as well as many others. In addition to this intensive effort at the state and local levels, we have recently offered this same kind of communication to our congressional leaders at the national level. Response to this initial offer is gratifying.

It is significant that Sen. Magnuson is Chairman of the Commerce Committee of the United States Senate, which deals with much of the medical legislation. He was instrumental in setting up the first division of the National Institutes of Health. He and Sen. Bone are credited with starting the National Cancer Institute. Furthermore, our other congressmen serve on vital committees dealing with medical and paramedical fields. It is important for us to make our views known to these people.

To all of these congressional representatives we are offering legislative liaison. This liaison is composed of a committee of interested members known to the congressman or senator. The committee is backed by our Public Laws Committee, our Legislative Affairs Committee and by such competent men as Mr. Gorman and Mr. Knudson. No sooner had this mechanism been established than we were consulted on important pieces of national legislation—including amendments to Medicare and the establishment of a National Trauma Institute designed to upgrade emergency care around the country.

There are those who still feel that medicine should not communicate with government. As I have stated before, it is this hesitancy to lend physicians' brain power and energies to the policy making bodies in government that has resulted in deterioration of medical care in other countries. I can only believe that extending common sense judgment and the advice of knowledgeable physicians to health programs must surely result in improvement of the health of our nation. ■

Lucius Hill M.D.

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ence in men and women that would justify any dispensation of this type.

2. The average longevity of women is greater than that of men, and the additional three year period of benefits would markedly increase the cost of the program.

3. Discriminatory against men.

4. If women are widows, and are classed as medically indigent, they are already covered.

5. As a taxpayer, would oppose because of the cost.

6. The validity of this suggested amendment would have to be assessed by budgetary and fiscal evaluation.

7. Would prefer to see Medicare program tried for two or three years to detemine accuate costs, before expansion.

8. Give current program more time, as this sounds as if it might be a gimmick to lower age for everyone to 62.

9. There is a question here of equal application of law. Why should a 62-year-old woman be legally more elderly or dependent than a 64-year-old man? Physiologically, the reverse is more likely.

Resume of reasons in support of 62 age requirement:

1. It would seem reasonable to lower the qualifying age for women to 62 years only in cases where the woman has retired and draws her Social Security at age 62.

2. Inasmuch as women usually marry men older than themselves, who would be retired by the time a woman achieves age 62, this request seems reasonable, as it would be in the case of a single or widowed woman at age 62.

Proposition 3: That payment of fees for the service of pathologists, radiologists, anesthetists and other medical specialists customarily provided as an adjunct to hospital care be covered by the basic hospital insurance program.

Consensus: All but one of the physicians returning the survey favored separate billing for hospital-based physicians.

Resume of reasons in support of separate billing for hospital-based medical specialists:

1. Separtion of billing by hospitals and by physicians has been arrived at after long and intensive consideration in order to avoid problems of monopolization, fee splitting, and other practices which are nearly universally regarded as detrimental to the welfare of the patient.

2. Most hospital-based physicians bill separately and the need to combine billing is questioned.

3. A hospital cannot and should not provide professional, i.e., medical services. The hospital should not be in the position to profit from the professional services of the physician.

4. Quality medical care comes from fee-for-service medicine.

5. To force all hospital-based medical specialists to sell their services to hospitals would reduce the already inadequate number of able physicians seeking to enter these fields.

6. It would be incongruous to place hospital-based medical specialists under that portion of the law which provides for institutional services on the basis of reimbursement for actual cost involved, and at the same time, place services of other physicians under that portion of the law which provides for charges on the basis of reasonable customary and usual fees.

7. Coverage of the services of hospital-based medical specialists as an adjunct to hospital care seems reasonable provided that the physician bills the patient directly.

8. Doctors should have time to hammer out their own relationship and feelings in this area rather than have a federal agency arbitrarily put them under the financial control of the hospitals.

Reason in support of placing hospital-based medical specialists under Title XVIII of Medicare:

1. Services should be covered by the basic hospital program and not billed separately—makes for increased costs, and confusion in billing.

Proposition 4: That a fixed schedule of fees be established for medical services rendered by physicians under the Medicare law and that no charge beyond such fees be permitted. In effect, this would provide coverage for the beneficiaries of Medicare similar to the "service benefits" currently provided for and accepted by the participating physicians of many Blue Shield Plans.

Consensus: Physicians indicated strong support for the usual, customary and reasonable fee concept of the current Medicare program.

Resume of reasons in support of usual, customary and reasonable fee concept:

1. Fixed fees would destroy a number of vital protections against over utilization, intrusion of third parties into the patient-doctor relationship, and against the freedom of doctors to evaluate their services, and patients to chose the physician who best suits their needs.

2. The usual reasonable fee concept is fairly standardized and it is felt the great bulk of physicians do not take advantage of the Medicare program. Unreasonable fees are precluded by the present law.

3. The proposed fixed fee schedule is in no way similar to service benefits under Blue Shield Plans.

4. If this represents an indemnity, okay, but if this represents the total fee, it will not work. There is not sufficient equality of medical needs, medical ability, or quality of care to suggest this equality of fee.

5. Fixed fees will tend to lower quality of medical care and limit the amount of care rendered.

6. Not all medical services are equal nor all circumstances equal.

7. Even though many doctors do not charge more than these fees, they resent a fixed fee and will feel that these will later be reduced as fund shortages develop in the program.

8. This alteration would definitely reduce the number of cooperating physicians, many, including this writer, would then offer only to treat private patients.

9. This would appear to be invalid if it were universally applied because each local area has in effect a different economy.

10. Until abuses of the program can be demonstrated, it does not seem just.

Propositions 5 and 6: (Because of similarity considered together); 5: Extension of the coverage of drugs to all prescription drugs regardless of their association to hospital confinement. 6: Extension of coverage to all surgical and orthopedic appliances and such items as wheelchairs, and hospital beds for home use, eye-glasses, hearing aids, podiatry, and everything pertaining to eye care and dental care.

Consensus: Physicians support maintaining current program until needs and cost of expanding availability of drugs and appliances can be determined.

Resume of reasons in opposing expansion of drug and appliance availability under Medicare program:

1. If this is feasible, I have no objections in principal; however, this proposal seems merely another broad and expensive extension of Medicare to become a retirement to the grave welfare plan, which is not at all its present intent.

2. Would prove to be costly.

3. More costs and government control.

4. Simply another item of expense. How about shoes and food, which are equally essential to the maintenance of health.

5. Do not favor coverage of drugs unless there is a basic fee for all prescriptions to be paid by the patient himself.

6. This is again a cost matter. Can Social Security taxes be raised to cover the costs?

7. One wonders how many unnecessary drugs would be requested by the beneficiaries from their physicians which were not necessarily based on medical necessity.

8. The basic plan should be tried for some length of time before an extension is brought about.

9. Coverage of drugs for the needy aged is included under State Medical Welfare Programs under Title XIX and this is not necessary under Title XVIII.

10. This seems to revolve around how much is considered necessary medical coverage.

11. Those who are 65 and over and unable to pay for surgical or orthopedic appliances can secure help from Department of Public Assistance. Part B coverage does provide some appliances.

12. Invoke Title XIX here rather than extend Title XVIII.

Proposition 7: Inclusion of a planned program of multiphasic screening—a preventive care program.

Consensus: Physicians ask that value of multiphasic screening—preventive care programs be proven before implemented on national scale.

Resume of reasons in support of "wait and see" attitude of multiphasic screening:

1. This is an awfully late time in life to start preventive programs.

2. Patients can program and budget for such care on their own responsibility without requiring society to legislate good judgment.

3. Assembly line or computerized care is not better medical care. The one to one relationship and attention to basics is the only answer.

4. In areas where this has been tried, costs have far outweighed usefulness in detecting disease.

5. Not necessary. Let us see how much Medicare costs before spending more money.

6. Has not proven itself, and would overload present medical facilities and personnel.

7. There are as yet, no solid data to show that multiphasic screening either lengthens the life or improves the health of those examined. Superficial screening may sometime impair health care by giving unwarranted reassurance.

8. Properly controlled pilot studies over a long period should be done to show whether this would be beneficial before a national program is instituted.

9. Multiphasic screening and preventive care programs are, in some respect, still in their infancy. Most broad coverage insurance health care plans, which are based on actuarial statistics, contain some features of these programs.

10. Again, the basic Medicare program should be tried for some length of time before extension is brought about.

11. A preventive care program should be a personal responsibility. For the needy aged, preventive care programs under Title XVIII will develop as Titile XIX approaches "comprehensive" care. (All objectives on this petition can be met by proper development of the Title XIX program).

12. If the federal government is going to get involved in this particular aspect at this time, I feel that it is much more important to get involved in the form of financial grants to those interested in working on this problem to see what can be arrived at. Let us try and make something work first before

continued on page 187

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His physician is going to prescribe an oral penicillin —Pen • Vee® K (potassium phenoxymethyl penicillin). It's usually so rapidly and completely absorbed that therapeutic serum levels are produced in 15 to 30 minutes. Higher serum levels generally last longer than with oral penicillin G.

Indications: Infections due to pathogens susceptible to oral penicillin G. Prophylaxis of rheumatic fever in patients with previous history of the disease.

Precautions: Skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin-allergy may occur. Measures for treating anaphylaxis should be readily available: epinephrine, oxygen and pressor drugs for relief of immediate allergic reactions; antihistamines and corticosteroids for delayed effects. Penicillin may delay or prevent the appearance of primary syphilitic lesions. Patients with gonorrhea who are suspected of concurrent syphilitic infections should be tested serologically for at least 3 months. Where lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. As with other antibiotics overgrowth of nonsusceptible organisms may occur; if so, discontinue and take appropriate measures. Treat β-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent development of rheumatic fever or glomerulonephritis.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity

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continued from page 185

we automatically include it in the government program where it possibly has little or no place to be.

13. The potentialities of this type of improvement in present day medical care are great and very exciting, but we are just in the very early stages. Grants for study and investigation should come first.

All physicians in the State of Washington who desire to add their advice to that sumarized above are invited to do so by writing to any or all of our Senators and Congressmen.

Kindly send a carbon copy of such letter to the Washington State Medical Association, 1800 Terry Avenue, Seattle 98101. These copies will be useful in providing additional study findings to Washington's congressional delegation.

Annual Meeting Planned by Psychiatrists

The North Pacific District Branch, American Psychiatric Association, will hold its annual convention at the Alderbrook Inn, on Hood Canal, Union, Washington, March 10-12, 1967.

Of primary interest during the three-day convention is the program, planned by Scientific Chairman Theodore L. Dorpat, for the morning of March 11, which will feature a panel discussion, "Community Psychiatry and Community Mental Health Centers." Participating members will be Eugene G. Goforth, psychoanalyst in private practice and a half-time teacher at the Seattle Community Psychiatric Clinic, who will talk about "Community Psychiatry and Controversy"; William R. Conte, Director of the State Department of Institutions, Olympia, who will discuss the Department's developmental plans for community mental health centers; Irving N. Berlin, Professor of Psychiatry and Head of the Division of Child Psychiatry at the University of Washington School of Medicine, who will talk about the role of a university training center in training for community psychiatry through community mental health centers; and Buell C. Kingsley, Director of the Whatcom County Mental Health Clinic in Bellingham, who will discuss the operations of that clinic and their plans to establish a community health center.

Moderator will be John S. Visher, Berkeley, California, full-time faculty member in the community mental health training program at the Langley Porter Neuropsychiatric Institute.

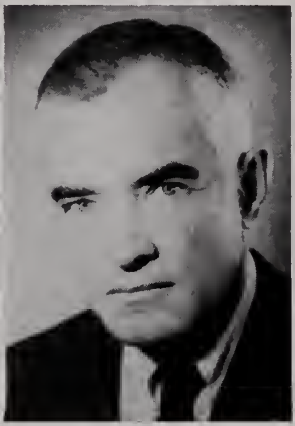
Other convention plans include a business meeting and a dinner-dance for members and wives. James D. Bremner, Olympia, is Social Program Chairman.

Internal Medicine Society Announces Program

Spokane Society of Internal Medicine has announced the three featured speakers for its Eighteenth Annual Meeting, Saturday, March 4, 1967, at the Ridpath Motor Inn in Spokane. They are Thomas A. Stamey, Professor of Surgery, Chairman, Division of Urology, Stanford University School of Medicine, Stanford Medical Center, Palo Alto, California; John P. Merrill, Director, Cardiorenal Section, Peter Bent Brigham Hospital, Boston, Massachusetts; and Belding H. Scribner, University of Washington School of Medicine.

THOMAS A. STAMEY, M.D.

BELDING H. SCRIBNER, M.D.



JOHN P. MERRILL, M.D.

Program

7:30 - 8:15	Breakfast and Panel Discussion	Roy C. Biehn
9:30-10:00	The Nephrotic Syndrome	Dr. Merrill
10:00-10:30	Salt and Water Metabolism	Dr. Scribner
10:50-11:20	Urinary Tract Infection	Dr. Stamey
11:20-12:15	Panel—Questions and Discussion	
2:00 - 2:30	Diagnosis and Treatment of Renovascular Hypertension	Dr. Stamey
2:30 - 3:00	Definitive Management of Chronic Renal Failure	Dr. Scribner
3:00 - 3:20	Visit the Exhibits	
3:20 - 3:50	Panel—Questions and Discussion	
7:30	Dinner and Program	

continued on page 191

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Adipex is ideal for short term treatment of your mildly depressed patients. Its soothing, mood-elevating ingredients ease the symptoms of nervous depression, while the antispasmodic helps to control tension-induced GI distress. With your professional counselling and supportive therapy with Adipex, a normal outlook can be restored to these patients as they learn to cope with or overcome the depression caused by temporary stress.

Dosage: The usual dose of Adipex Ty-Med is one tablet or capsule daily, taken on arising.

Side Effects: Insomnia, excitability, central excitatory symptoms or cardiovascular reactions.

Precautions: Discontinue use if rapid pulse, dizziness or blurring of vision occurs.

Contraindications: Coronary or cardiovascular disease, hypertension, hyperthyroidism, hyperexcitable or psychotic states, glaucoma, or idiosyncrasy or habituation to any of the components.

Caution: Federal law prohibits dispensing without prescription.

Supplied: Bottles of 100 and 1000 tablets or capsules.

Reference: Feigley, D. M.: Office care of mild emotional distress, Dis Nerv Syst *23*:450 (Aug) 1962.

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The AMBAR SCRAPBOOK of **Obesity Oddities**

FACT & LEGEND

GALLSTONES HAVE BEEN FOUND IN 60% OF PATIENTS WHO WEIGH MORE THAN 300 POUNDS, 45% HAVE DIABETES, AND 15-TO-20% HAVE HIGH BLOOD PRESSURE.

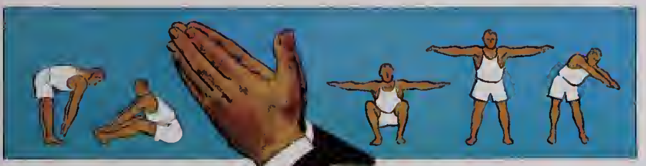
SOURCE: DUNCAN, G.G.: SCIENCE NEWS LETTER, 83:403 (JUNE 29) 1963.

NAPOLÉON BONAPARTE

LOST THE BATTLE OF WATERLOO BECAUSE HE WAS TOO FAT!

ACCORDING TO THE NEW YORK TIMES OF APRIL 13, 1890, THE DEFEAT OCCURRED BECAUSE HE FAILED TO CHECK HIS INTELLIGENCE INFORMATION. "IT WAS A MATTER OF MERE INDOLENCE AND THIS INDOLENCE WAS CAUSED BY FAT."

SOURCE: JAMA 186:65 (OCT. 5) 1963.



THE BOOK ***"PRAY YOUR WEIGHT AWAY"*** URGES READERS TO "ASK GOD TO HELP YOU LIKE EXERCISE" FOR 15 MINUTES A DAY.

SOURCE: REV. C.W. SHEDD: NEW YORK, LIPPINCOTT, 1958.

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THE AMBAR FORMULA PROVIDES **METHAMPHETAMINE** TO HELP **ELEVATE** THE **MOOD** AND **PHENOBARBITAL** TO HELP REDUCE **ANXIETY.**

**SOURCE: ARCHIVES OF GENERAL PSYCHIATRY 8:26 (JUNE 1963).*

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methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming)

BRIEF SUMMARY—**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. See package insert for further details.

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up to 10-12 hours clear breathing on one tablet

It's clear—Dimetapp lets your "stuffed-up" patients breathe easy again. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. The key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done...in a hurry.

Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy. **Precautions:** Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. **Side Effects:** Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening. **Supplied:** Bottles of 100 and 500.

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continued from page 187

Dr. Robinson to Deliver John LeCocq Lecture

Robert A. Robinson, chairman of the Department of Orthopedic Surgery at Johns Hopkins University School of Medicine, will deliver the third John LeCocq Lecture in Orthopedics 8 o'clock Friday evening, March 3, in the Health Sciences Auditorium at the University of Washington.

ROBERT A. ROBINSON, M.D.

His topic will be "Fusions and Pseudoarthroses of the Spine". Dr. Robinson is well-known for his contributions to spinal surgery and a pioneer in the use of the electron microscope to study the fine structure of bone cells.

X-Ray of Month on Page 170

Running vertically on the x-ray film, from the esophago-gastric junction caudally is a dense, triangular shaped, fenestrated, opaque shadow.

This represents bone formation in an abdominal surgical scar.

This is a type of myositis ossificans, and in spite of the general opinion that it is a rare finding, actually is seen not too uncommonly. They are most often seen as a complication in upper abdominal scars contiguous with bone or cartilage. The pathogenesis is considered the same as myositis ossificans occurring in extremities after soft tissue injuries, contiguous with periosteal injury. Surgical injury to perichondrium or periosteum with incisions contiguous with ribs or sternum and subsequent hematoma formation sets up the same mechanism as myositis ossificans traumatica.

The resultant bone formation in the abdominal scar is usually totally asymptomatic, but rarely it can cause pain and be tender.

When symptomatic, complaints are made within a month or two following surgery. The bone formation can be seen radiographically as early as 4 weeks postoperatively.

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The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

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IDAHO

Idaho State Medical Association—360 SONNA BUILDING, Boise, Idaho 83702

PRESIDENT *A. Curtis Jones, Jr., M.D., Boise*
SECRETARY *William R. Tregoning, M.D., Boise*
EXECUTIVE SECRETARY *Mr. Armand L. Bird, Boise*
annual meeting, June 28-July 1, 1967, Sun Valley

Officers and Councilors Hold Busy Session

Officers and Councilors of the Idaho State Medical Association met in Boise Dec. 16 and 17, 1966.

A number of important matters were considered during the day and a half session: approved the appointment of a Medical Education Committee to coordinate all programs involved in this field; approved incorporation of the Idaho State Medical Association as a not-for-profit organization to provide a legal entity to own property; approved tentative plans to remodel the association's property into new offices for the Association and Board of Medicine; heard a comprehensive report from Raymond L. White, Boise, Executive Director of the Idaho Foundation for Medicine and Biology, Inc., regarding activities of that organization in the field of medical education; referred back to its sponsors Resolution No. "A" adopted by the House of Delegates in June, regarding podiatry; considered the 1967-69 budget of $708,000 for the student exchange program of WICHE; approved a program to include the fee schedule of the South Idaho Medical Service Bureau, Inc., in the association's contract with the Idaho Hospital Service Blue Cross program; heard a report from Terrell O. Carver, Boise, Administrator of Health regarding the Board of Health's legislative program and budget for the coming two years; heard a report from Mr. Bill Child, Commissioner of the State Department of Public Assistance regarding operation of Title XVIII and XIV of the Social Security Medical Care Program administered by his department; approved operation of a Legislative Dispensary for members of the 39th Idaho Legislature; voted to ask each of the component societies to contribute $3 per member to assist in covering the costs of the dispensary; approved plans to update and reprint the pamphlet developed by the auxiliary entitled "Health Careers in Idaho."

Committees Meet

The Relative Value Guide of the Idaho State Medical Association, particularly as it relates to anticipated proposals for a change in the Idaho Industrial Medical Fee Schedule, was under study in Boise on Dec. 17, 1966, when members of the Medical Economics and Fee Schedule Committee met with the Industrial Medical Committee.

Members of the Industrial Medical Committee attending were James J. Coughlin, chairman, Boise; Russell Tigert, Jr., Soda Springs; David W. Heusinkveld, Lewiston; Leland K. Krantz, Idaho Falls, and Richard P. Sutton, Burley.

Members of the Medical Economics and Fee Schedule Committee present were: Glenn E. Talboy, Chairman, Boise; Reuben C. Matson, Jerome; Dennis L. Wight, Pocatello, and G. Curtis Waid, Idaho Falls.

Reports by both committees will be available in the future.

Service to Legislature

With the 39th Idaho Legislature under way, the Idaho State Medical Association will again provide medical care services to the lawmakers. Frederick D. Koehne, Nampa, will serve as the attending physician in the Legislative Dispensary which will be located in the Senate Gallery. Members of the Ada County Auxiliary will serve as receptionists during the session.

If your patients who are members of the Legislature have medical problems, it would be most helpful to send a note to the Executive Secretary so that proper care can be provided.

Vision to See--Courage to Act

We must consolidate gains made in the November elections. Participation in political action is most vital now, in this off-election year, if similar gains are to be made in 1968.

We must continue to develop our skill at the conference table if we are to mould programs already passed to the benefit of our patients.

We must give attention to areas of need such as emergency care, health education, professional discipline, recruitment of workers in the health fields, and others. Vacuums exist that will somehow be filled. If not by us, then by the governmental bureaucracies.

The year just past has been quite eventful. We have seen the power of the federal legislative dreadnaught and the greater power of citizens at the polls. We have seen lawmakers, unwise enough to let themselves be stampeded into ill-advised and hasty legislation, fall by the wayside.

We have felt the pressures that governmental bureaucracy is able to exert with one hand—while the other is extended in a plea for help in making poor programs work.

We have seen the disillusion of "beneficiaries" of some of these programs when they compare the much promised with the little delivered.

Some of these experiences have been unpleasant for us and our patients; others point the way for action.

Although revolutionary forces have moved their efforts from battlefields to the halls of Congress, their threat is no less real.

May we all find in this New Year, the vision to see and the courage to act, and may 1967 be a good year for you.

Sincerely,
A. CURTIS JONES, M.D.,
President, Boise
WALLACE H. PIERCE, M.D.,
Past-President, Lewiston
JAMES R. KIRCHER, M.D.,
President-Elect, Burley
WILLIAM R. TREGONING, M.D.,
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Councilor, Twin Falls
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Councilor, Rexburg
ALEXANDER BARCLAY, M.D.,
A.M.A. Delegate, Coeur d'Alene
DONALD K. WORDEN, M.D.,
A.M.A. Alternate Delegate, Lewiston

The Winter Clinics Set for March 3-5

The Winter Clinics, sponsored by the Ada County, and Southwestern Idaho District Medical Societies, will be held March 3-5, 1967, at Shore Lodge in McCall, Idaho. Registration is $10.

Program

March 3

4:15 p.m. *Pneumocystis Carinii Pneumonia*
Jack M. Docter, M.D., Seattle
4:45 p.m. *Urological Emergencies*
Julian Ansell, M.D., Seattle
5:15 p.m. *Cutaneous Warnings of Systemic Disease*
John M. Shaw, M.D., Tacoma
6:00 p.m. *Unusual Beta-Hemolytic Streptococcus Infections in Obstetrics and in Postoperative Patients*
Donald McIntyre, M.D., Seattle
6:30 p.m. *Pancreatitis*
Frank B. McGlone, M.D., Denver.
7:00 p.m. *Cystic Fibrosis*
Jack M. Docter, M.D., Seattle

March 4

8:00 a.m. World Population. *Contraceptives with Emphasis on the Intrauterine Device*
Donald McIntyre, M.D., Seattle
8:30 a.m. *The Course of Ulcerative Colitis*
Frank B. McGlone, M.D., Denver.
9:15 a.m. *Enuresis*
Julian Ansell, M.D., Seattle
9:45 a.m. *Failure to Thrive*
Jack M. Docter, M.D., Seattle
1:00 p.m. Ski Races—Brundage Mountain
8:00 p.m. Banquet—Shore Lodge
The Sun and Space
John W. Firor, Ph.D., guest speaker, Director, High Altitude Observatory, Boulder, Colorado, Professor of Physics, University of Colorado

March 5

9:00 a.m. *Urinary Tract Infections*
Julian Ansell, M.D., Seattle
9:30 a.m. *Medical and Surgical Treatment of Ulcerative Colitis*
Frank B. McGlone, M.D., Denver
10:00 a.m. *Pediatric and Teenage Gynecology*
Donald McIntyre, M.D., Seattle
10:30 a.m. Adjourn

Legislative Committee Prepared

As the Legislature moves into action, so will the association's State Legislative Committee. Loy T. Swinehart, Chairman; members: Alfred M. Popma, Raymond L. White, Howard E. Adkins and John M. Ocker, Jr., all of Boise.

During the session the committee will meet regularly to consider, promote or oppose measures relating to health, medicine and patient care in Idaho. Component society legislative committees will be utilized for liaison purposes by the state committee when needed.

Every effort will be made to keep the membership informed of legislative activities. Members are urged to let the state committee know of any legislation being prepared of interest or concern to organized medicine.

OBITUARY

DR. JOHN L. MULDER, *75, Salmon, died Dec. 21, 1966. He was born October 7, 1891, at Chicago, Illinois, and received his elementary and secondary education at Rock Valley, Iowa, where his family moved.*

He received his medical degree from the University of Minnesota Medical School on June 19, 1919, practiced at Chaska, Minn., from 1919 until 1921, and at Cavalier, N. Dak., from 1921 until 1936.

Dr. Mulder was licensed to practice medicine and surgery in Idaho on October 7, 1936, and practiced at Salmon.

He was a World War I Army veteran and a member of the Lemhi Lodge 11, AF & AM; Rocky Mountain Lodge 5, IOOF, the American Legion. He was an elder in the Presbyterian Church.

GENERAL NEWS

Continuing Education Course Offered by UBC

The Vancouver General Hospital and University of British Columbia Department of Continuing Medical Education are sponsoring a course in Obstetrics and Gynecology, Surgery and Medicine, March 13-17, 1967.

The course has been designed to provide an opportunity for physicians to review contemporary developments in these fields of medicine. The emphasis will be on pracical management problems.

Principal instructors for the course are R. C. Dickson, professor and head, Department of Medicine, Dalhousie University; D. P. Swartz, clinical professor, Department of Obstetrics and Gynecology, Harlem Hosptial Center, Columbia University; and R. C. Harrison, recently appointed professor and head, Department of Surgery, University of British Columbia.

D. P. SWARTZ, M.D.

Tuition is $60. Write Department of Continuing Medical Education, 301 Westbrook Building, University of British Columbia, Vancouver 8, B. C.

R. C. HARRISON, M.D.

R. C. DICKSON, M.D.

What's Happening At The Foundation

ROLAND D. PINKHAM, M.D., Seattle, Washington

As you recall at the Annual Meeting of the Washington State Medical Association in September, 1966, the House of Delegates voted for the formation of a Foundation, henceforth to be known as the Washington State Medical Education and Research Foundation, and for an increase in dues, a portion of which was to make possible such a Foundation.

The members of the Foundation (the Board of Trustees of the Washington State Medical Association) met on October 30, 1966, and elected the Directors and officers for the ensuing year. These include H. Paul Dygert, Donald Hall, Lucius Hill, Carl Mudge, Charles Muller, Roland Pinkham, Robert Rushmer, Carl Schlicke and Stanley Tuell. Dr. Pinkham was elected president, Dr. Dygert, vice president, Dr. Hall, treasurer, and Dr. Tuell, secretary.

The Directors then met and voted for the establishment of an Ad Hoc Committee to determine the need and criteria for an overall Advisory Committee to the Foundation. Discussion regarding future planning and program formulations were discussed. At long last the Foundation was now a reality.

Until the Foundation is permanently staffed by its own Director of Research, and personnel, the Executive Committee of the WSMA has asked our Executive Secretary, Mr. Richard F. Gorman, to be responsible for the development of the Foundation program and that after the Foundation personnel is selected, he remain directly connected with the duties of the Foundation so that its functions are integrated with the objectives of the WSMA and duplication and confusion do not occur.

ROLAND D. PINKHAM, M.D.

The Executive Committee also has agreed to retain the services of Mr. Murray Klutch of San Francisco as consultant and advisor in establishing the programs of the Foundation. Mr. Klutch is the Director of Planning and Research for the California Medical Association and for the California Medical Education and Research Foundation. His services have been most valuable and he has recommended several people for the position of Director. We are now in the process of selecting the Director and hope to have him on the job by March or April of 1967.

In the meantime, we have discussed the areas where we can be of greatest service to society and the profession. We have had detailed discussions with the Public Health Service people on a variety of things. It takes time to establish the type of relationship necessary with granting agencies and particularly is this true with the Public Health Service, which at this time is undergoing a radical reorganization program of its own. Our concept of a Foundation is new to them, and though they are most receptive, they have not been in a position to make commitments to date. We hope the situation will clarify itself in the next few weeks after their reorganization is finally completed.

We are still in line for the Manpower and Facilities Planning including the Data Bank, and this should be decided soon. When the money for these grants will come through, nobody knows as of now. Also we are interested in a study concerning rural health care and physicians' services. The money for this study is currently available if we decide to pursue the study. We also are anxious to be active in physician participation in graduate medical education under the Regional Programs and we have had productive discussions with Dr. Donal Sparkman who heads the Regional Programs, and I believe we have a significant and important part to play in this field. In addition, we are conscious of physician participation in programs such as Head Start, Urban Health Center Planning, Mental Health Centers, Air and Water Pollution, and so forth. Many of these programs would lend themselves to Foundation participation—either in part or totally. When we are able (hopefully soon) we will be moving in this direction.

The great push now for the so-called primary or family doctor will need community and general medical participation, so I suspect the Foundation may have a real function in this area. Certainly a study to determine the need for medical specialists now and in the future is most necessary. Just what specialists are really needed and where they are

continued on page 198

fluocinolone acetonide — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

controls infected inflammatory dermatoses that start from scratch

The "itch-scratch" cycle usually associated with inflammation often results in infected dermatoses because broken skin surfaces are particularly vulnerable to pathogenic bacteria.[1] To treat infected inflammatory dermatoses, Neo-Synalar Cream combines the most active topical corticosteroid with a highly reliable antibiotic generally reserved for topical application.

In Neo-Synalar, fluocinoline acetonide controls the inflammation and provides rapid relief from associated pruritus. At the same time, its antibacterial component—neomycin—combats superficial infection caused by many gram-positive and gram-negative bacilli[2] that often colonize and thrive on abraded skin.[1]

A specially formulated vanishing cream base that is greaseless and odor free makes Neo-Synalar cosmetically appealing, and encourages greater patient cooperation.

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controls the infection

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stops the scratch

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of its components. **Precautions:** Neomycin rarely produces allergic reactions. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. **Side Effects:** Side effects are not ordinarily encountered with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Neo-Synalar under certain conditions. **Availability:** Neo-Synalar Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

References: **1.** Pillsbury, D. M., Shelley, W. B., and Kligman, A. M.: A manual of cutaneous medicine, Philadelphia, Saunders, 1961, p. 79. **2.** Barber, M., and Garrod, L. P.: Antibiotic and chemotherapy, Baltimore, Williams and Wilkins, 1963, p. 111.

Neo-Synalar®

(fluocinolone acetonide-neomycin sulfate cream)

Cream

continued from page 195

going to be trained is a most urgent and fundamental concern. We would hope to be able to obtain private foundation funds for this study.

These and many other problems are requiring our attention, but we are proceeding somewhat more slowly than we would like for the simple reason that we do not want to overextend ourselves financially until we have firm commitments. It would be very easy to become bankrupt before we start if we are not extremely careful.

This Foundation is yours—we hope to do an outstanding and significant service for you but we need your cooperation. Any suggestions or criticims as to programs or studies to be considered would be most welcome. We have had numerous suggestions to date, and we are pleased with such interest.■

1120 Cherry, No. 250, (98104)

Erratum

Editor's Note: Below are the references for the article, "Psoriasis, A Physiopathologic Adaptive Reaction," by Daniel R. Kohli, M.D., that appeared on page 39 of the January, 1967, issue. Reference No. 16 was left out of the original list, therefore, confusing the sequence of the references which followed.

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Max Parrott Reports . . .

Review Committee A of AMA Board of Trustees

It has occurred to me, with gentle prodding from the editor, that I might use a column or two of this vehicle now and again as a means of communication with the physicians of the area as to my activities on the Board of Trustees of the American Medical Association. At the time of my election the Board was in the process of reorganizing itself into four review committees of three men each as a means of facilitating its functions. These committees were not to be used as reference targets but rather as study groups, each with assigned councils and standing committees of the Association to review in depth, make recommendations and report back to the Board therewith. My appointment and task fell in with Committee A, which went to work immediately under the chairmanship of Alvin Ingram of Tennessee. The third member is Dwight Wilbur of California. The major portion of our function to date has been to review the Council on Postgraduate Programs, the Council on Drugs, and the Council on Foods and Nutrition. This also involves the division and department of the AMA staff that functions in each specific area. In that all of our assignments fell within the purview of the Division of Scientific Activities, Hugh Hussey, director of that division, functions as the secretary of Review Committee A.

It is of interest to note that the November issue of this journal was given over largely to the question of the continuing medical education of the practicing physician. Review of the Council on Postgraduate Programs immediately threw us into this whole program as it concerns the American Medical Association, and about 80 per cent of what the AMA does concerns various aspects of the whole problem in one way or another.

MAX H. PARROTT, M.D.

A quick and brief historical sketch may be of value here. The Council on Postgraduate Programs was originally built out of the Council on Scientific Assembly, which in addition to being responsible for the program content of the conventions and the functionings of the scientific sections of the Association, was given the responsibility of continuing medical education with all of its intra and extramural implications. The conflicts that arose were not so much those of interest as they were of magnitude of the charge. It became obvious that a division of labor was necessary and that a new committee should be instituted. It would be charged solely with the innovation, facilitation and coordination of lifetime learning programs, both within the AMA and in association with outside associations with similar interest. Thus, it was recommended that the old Council on Scientific Assembly be reconstituted and recharged and that a new committee be established. Charged with the overall aspects of continuing medical education, this committee eventually was to become a council. This was the background of supplemental reports O and P of the Board of Trustees at the Clinical Meeting, 1966, in Las Vegas.

A recent meeting with the representatives from the Council on Medical Education emphasized the fact that this council has always had charge of approval and accreditation of all programs as related to medical education at all levels. It is obvious that an innovating body should not be in the business of accrediting its own programs. The function of accreditation will undoubtedly stay with the Council on Medical Education.

It might be of interest to note what became of the old so-called "National Plan" and its "Core-Curriculum". It was pointed out in discussions before Review Committee A, that a national plan of this sort was doomed to failure because of its rigidity. Its format was built basically upon traditional undergraduate medical programs which did not suit the needs or wants of the active practicing physician. Thus stimulation and motivation would be most difficult. The plan was very expensive as will be all lifetime learning programs—so expensive, indeed, that it cannot be the sole prerogative of any one organization, be it the AMA or whatever. Therefore, the charge to the new committee will be broad in the hope of tapping all resources in this respect. This was in response to the opinion of all the consultants to Review Committee A, that in fact, the AMA is the ideal organization to assume leadership in this field. These consultants, for the most part, were full time medical educators.

It was also pointed out that there were only three national organizations who could coordinate the job of continuing medical education. These are the American Association of Medical Colleges, The Public Health Service and the American Medical Association. Of the three, the AMA is the only organization that 1. is in the independent sector and 2. represents the greatest number of consumers for the resultant product. However, all have a major stake in this activity, in addition to many other groups and associations which may be listed as follows: the voluntary health organizations, health care and research foundations, the American Hospital Association and the community hospitals and their various directors of medical education, programs sponsored directly by individual medical schools, ancillary associations such as the American Bar Association, engineering groups, space agencies, the Armed Force, organizations with an international flavor such as the World Health Organization, World Medical Association and the international specialty organizations. Last, but maybe not the least, that which the various implementations of P.L. 89-329 might create.

The work of this Review Committee A as regards this council and the new committee should be complete and reported to the Board by the annual session in June. Review Committee A is active at present with the Council and Department on Drugs, which, incidentally, has a major impact in the field of continuing medical education. Perhaps we can discuss these deliberations at a later date.

Respectfully submitted,
MAX H. PARROTT, M.D.
Trustee, AMA

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- 1% solution for adults (resistant cases)

Also NTZ® Solution or Spray
Antihistamine-decongestant

BOOKS

RECEIVED: The following books have been received. Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

Current theapy, 1966. Edited by Howard F. Conn, M.D. 857 pp. Price $13. W. B. Saunders Company, Philadelphia and London, 1966.

World eradication of infectious diseases. By E. Harold Hinman, Ph.D., M.D., M.P.H., F.A.C.P., F.I.C.S. (Hon.), Professor and Head of Department of Preventive Medicine, Jefferson Medical College, Philadelphia, Pennsylvania; Member, Expert Advisory Panel on Malaria, World Health Organization; Formerly, Chief Malariologist, Tennessee Valley Authority; Dean, School of Medicine—School of Tropical Medicine, University of Puerto Rico; Chief Technical Resources Division, Office of Public Health Agency for International Development (Formerly ICA). 223 pp. Illustrated. Price $8.50. Charles C Thomas, Springfield, Ill., 1966.

Chemistry and therapy of peptic ulcer. By David C. H. Sun, M.D., D.Sc. (Med.), Director, Gastrointestinal Research Laboratory. Veterans Administration Hospital, Phoenix, Arizona. 238 pp. Illustrated. Price $8.50. Charles C Thomas, Springfield, Ill., 1966.

Practical endocrinology. By James H. Hutton, M.D., F.A.C.P., Consulting Endocrinologist, Illinois Central Hospital Department; Past President, Chicago Medical Society; one time Professor of Endocrinology, Chicago Medical School, Chicago, Illinois. 99 pp. Price $5.50. Charles C Thomas, Springfield, Ill., 1966.

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Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

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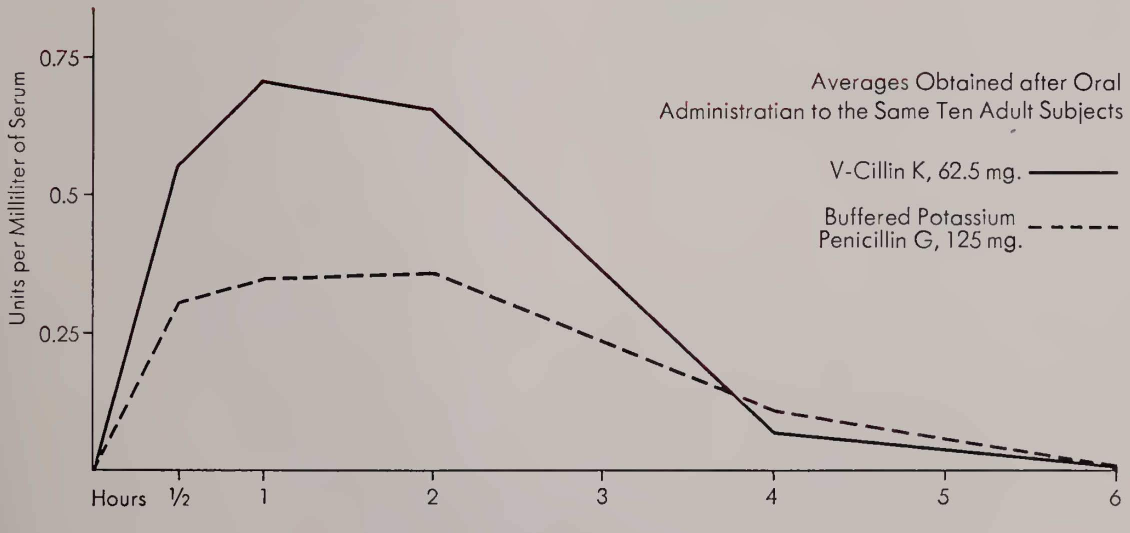

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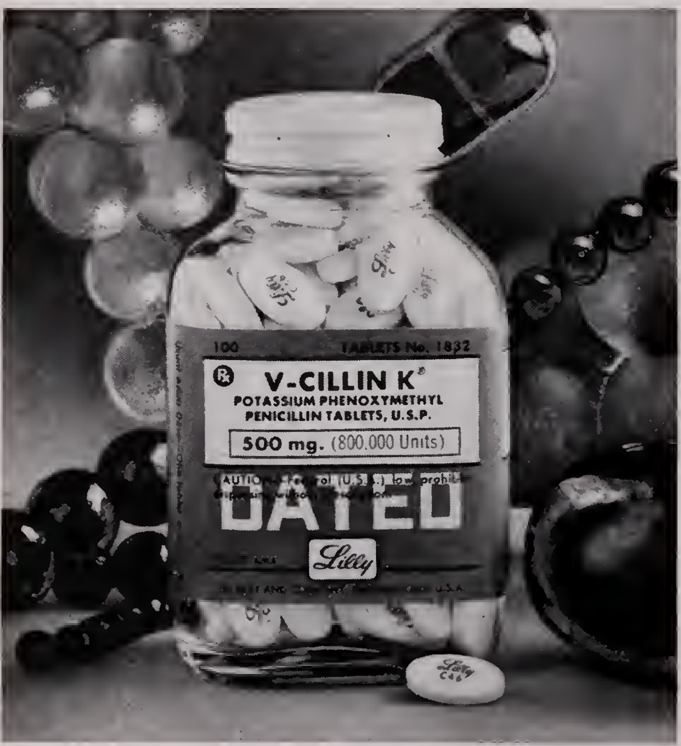

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this issue: the nose as a shock organ

the nose as a shock organ

by Charles J. Shagoury, M.D., Chelmsford, Massachusetts

"Is it a cold, hay fever, or has he been reprimanded by his boss?" Occasionally, you will ask yourself this question when confronted by a patient with abrupt onset of rhinorrhea, nasal obstruction, and sneezing. Usually the history will elucidate the problem, but examination of the nose will often provide valuable clues to the correct diagnosis.

The nose is a shock organ in a double sense. First, it is in the nose that the confrontation takes place with the surrounding atmosphere. For twenty-four hours a day, the nose must meet the varying challenges of the inspired air, containing perhaps noxious chemicals, dust, dirt, bacteria, viruses, fungi, and industrial pollutants of all kinds, and render it clean, virtually sterile, and fit for the sensitive alveoli of the lungs. Whatever the temperature or humidity of the atmosphere, the nose must transmit it to the lungs at approximately 98°F, and with a humidity of approximately 40%.[1]

Second, in particularly susceptible patients, the nose acts as a shock organ in a manner totally unrelated to its normal function. Persons with hay fever respond to ordinarily harmless materials by extreme nasal congestion, with marked rhinorrhea and violent spasms of sneezing. In some patients, exposure to threatening or disagreeable agents, or situations involving mental conflict may result in a reaction which is exclusively nasal, with swelling of the turbinates, and marked hypersecretion.[2]

Nasal symptoms usually result when the nose seeks to perform its function of getting rid of noxious and dangerous elements in the atmosphere, and prevent their admission to the trachea and lungs. Small particles are removed by the mucous coating which blankets the nasal passages. This mucous blanket contains a bacteriostatic agent, lysozyme, which destroys most air-borne bacteria.[3] The mucinous content renders the surface sticky, causing dusts and small particles to adhere. It has been postulated that this process is rendered more effective through adsorption because of a surface electrical charge on the nasal mucosa.[4] The cilia then sweep the particulate matter to the pharynx. The nose can prevent entrance into the lungs of particles as small as three microns in diameter, but smaller particles elude the nasal barrier. Most bacteria causing respiratory infections are one to three microns in diameter, but since they usually are inhaled in clumps, they are efficiently removed as a rule. Viruses, which are of the order of 1/1000 of this size, are less efficiently dealt with, unless they occur in very large aggregates.[5]

The nose will react in a more or less similar manner, whatever the nature of the offending agent, whether it be an irritant chemical, virus, pollen, or distasteful emotional situation. In acute coryza, the most characteristic sign is a profuse watery discharge. The volume of secretion may rise from practically nothing to nearly 60cc in twenty-four hours.[6] The mucous membrane is reddened and engorged, while the turbinates are markedly swollen. After the first day or two, the secretion becomes thicker, yellowish, and more difficult to expel. The surface cells are largely destroyed, contributing to the copious discharge, which now also contains numerous inflammatory cells which have migrated to the area. Gradually, over a period of a few days, or a week, the flood abates, the swelling and redness subside, and the nasal epithelium resumes a healthy appearance.

Repeated attacks of rhinitis, particularly if there is an underlying element of obstruction, may result in chronic rhinitis. The mucous membrane is constantly swollen and reddened. Sticky, mucopurulent secretions are a continuous feature, and the glandular elements are hypertrophied. Commonly, the mucosal surface takes on an irregular, rounded "mulberry" appearance, and nasal passages are occluded by the swollen turbinates and redundant mucosa.

While all of us are susceptible to colds, the victim of hay fever, or allergic rhinitis, displays a marked nasal reaction to materials in the air which leave his associates unaffected. In such a patient, the nasal mucosa has become an allergic "shock" organ. Contact with the nasal allergen causes local release of histamine, with vasodilatation, increased vascular permeability, and severe nasal congestion, similar to the "wheal" and "flare" reactions in the skin, when the epidermis is the allergic shock organ. While we eagerly await the coming of spring, the hay fever sufferer dreads the blooming season, whose invisible pollens are poisons to his sensitive nose. His neighbor's cat or dog may provoke paroxysms of uncontrollable sneezing. In some cases a specific allergen is not identified, but the triad of rhinorrhea, nasal obstruction, and sneezing is present.[7] The nose in these cases shows a pale, boggy, edematous mucosa, with a thin mucoid secretion. The mucous membrane shows extreme retractility to 1% cocaine or ephedrine. If the patient has medicated himself prior to examination, the nasal passages may appear abnormally patent, or show exaggerated congestion due to rebound reaction. The secretion may show a large number of eosinophils particularly after an attack of sneezing or rhinorrhea. Touching the mucosal surface, especially of the inferior turbinate, leaves an indentation, showing that the swelling is due to stasis and edema, rather than actual hyperplasia of the mucous membrane as in chronic hypertrophic rhinitis. Though the pale swollen mucosa is the hallmark of allergic rhinitis, as usually seen by the physician, exposure of allergic subjects to their known allergens results in a brief hyperemic phase, followed by pallor and edema.[8]

In the later stages of allergic rhinitis, the chronic edema of the mucous membrane results in the formation of polyps, clusters of grape-like masses hanging from the roof of the nose, with a pale glistening surface, contributing significantly to the sense of nasal obstruction and oppression.

A large group of patients show symptoms of nasal congestion when confronted by adverse life situations.[9] In these unfortunate persons, anxiety, frustration, and resentment are often accompanied by a runny nose and nasal obstruction. Lacrimation adds to the nasal stuffiness. This autonomic response, mediated by the parasympathetic nervous system, may be part of a general parasympathetic reaction, or may possibly represent in part, a symbolic effort to wash out and crowd out the offending situation.

Nasal congestion may also occur in some patients at times of sexual stimulation, and in women during menstruation and pregnancy, even to the point of epistaxis.[10] The relationship is obscure; castration results in atrophy of the nasal glands, and their action is inhibited by the hormones of the hypophysis and the thyroid.[11] The nose may be the shock organ in drug therapy. The nose may also bear the brunt of industrial stress, in those who work in a hot dry atmosphere, or those exposed to acid fumes, or irritating dusts. As the air in our cities is increasingly polluted by exhaust fumes, and industrial irritants, whole urban populations may suffer from chronic nasal and respiratory symptoms.

Of course, nasal reactions are not just infectious, or allergic, or emotional. Particularly in the chronic sufferers, there is an interdependence of all three. Death of a relative, or other psychic shock can pre-

(concluded on following page)

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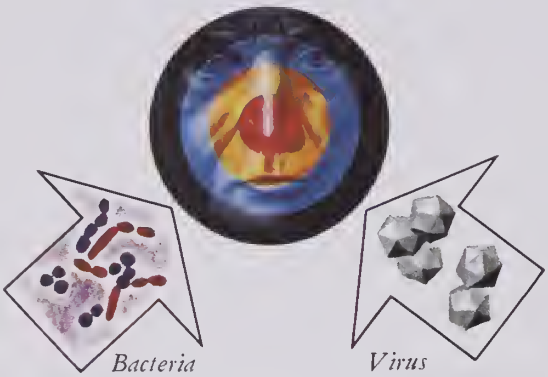
cipitate an attack of rhinorrhea in hay fever sufferers.[12] Others develop attacks of vasomotor rhinitis following change in temperature, chilling, or exposure to the sun, or simply warm bedclothes.



The complex interplay of allergy and infection is largely unclear. Allergy to the viruses and bacteria which cause infection has been postulated, but is difficult to demonstrate. The swollen obstructed allergic nose is more susceptible to infection. At the same time, infection often precedes or precipitates an allergic attack. Exposure of a susceptible patient to an allergen can activate latent virus organisms leading to infection.[13] This "jolt" reaction represents a summation of an allergen and a virus leading to symptoms in the nose as a shock organ, which neither could have produced alone. In childhood, repeated attacks of bronchitis and colds may be inflammatory reactions to an allergen, or precipitated by exposure to an allergen. These children may later develop typical allergic rhinitis. On the other hand, children with typical allergic histories, eczema, asthma, and allergic familial backgrounds, may later develop typical infectious rhinopathies. Skin tests in such patients are usually positive.

Nasal reactions are part of the systemic response of the patient to an unwelcome stimulus. In cases of respiratory infection and exposure to atmospheric irritants, the reactions are useful, and to some extent desirable. They are usually self-limited, disappearing within a few days, or upon removal of the provoking agent. Here the distressing symptoms can be ameliorated with appropriate decongestant agents, or, in the case of severe or complicated respiratory infections, antibiotics may be given, with reasonable confidence of a cure. On the other hand, when nasal reactions are the peculiar response of an individual to an allergen, or to an undesirable situation, they serve no useful purpose. The nose here is a shock organ in a stressful situation, but can furnish no response of value. It merely causes the patient symptoms which add to his problems. In these cases, symptomatic treatment is of great benefit, but often the underlying faulty pattern of response cannot be altered. Such a patient may literally be considered to be paying his way in life "through the nose."

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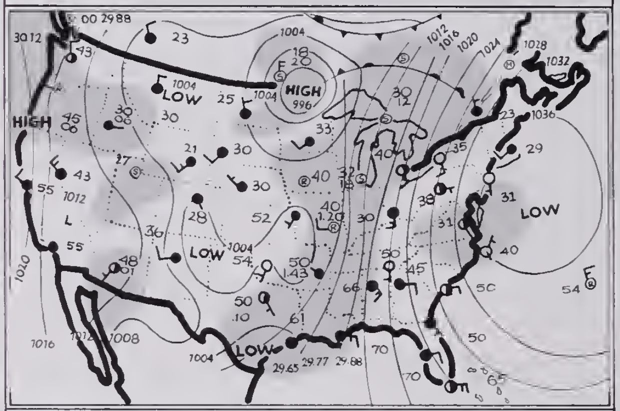

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Principles of anesthesiology. By Vincent J. Collins, M.S., M.D., Director, Division of Anesthesiology, Cook County Hospital, Chicago, Illinois; Associate Professor of Anesthesiology, Northwestern University, School of Medicine, Chicago, Illinois. 1175 pp. Illustrated. Price $35. Lea & Febiger, Philadelphia, 1966.

Cellular concepts in rheumatoid arthritis. Compiled and edited by C.A.L. Stephens, Jr., M.D., F.A.C.P., Vice President, Southwestern Clinic & Research Institute, Inc., Visiting Professor in Research, University of Arizona, Tucson, Arizona; and A. B. Stanfield, M.S., Associate Professor, University of Arizona; Director, Tissue Culture Laboratory, University of Arizona, Tucson, Arizona. 212 pp. Illustrated. Price $14.75. Charles C Thomas, Springfield, Ill., 1966.

Atlas of Hernia repair. By Carl H. Calman, M.D., F.A.C.S., Clearwater, Florida; formerly Assistant in Clinical Surgery, Washington University School of Medicine, St. Louis, Missouri. 159 pp. Illustrated. Price $16.75. C. V. Mosby Company, Saint Louis, 1966.

Stereoscopic atlas of mastoidotympanoplastic surgery. By Harold F. Schuknecht, M.D., Professor of Otology and Laryngology, Harvard Medical School; Chief of Otolaryngology, Massachusetts Eye and Ear Infirmary; Chief of Otolaryngology, Massachusetts General Hospital; Consultant in Otolaryngology, Boston Lying-In Hospital; Consultant in Otolaryngology, Children's Hospital Medical Center; Consultant in Otolaryngology, Beth Israel Hospital; Boston; and Werner D. Chasin, M.D., Instructor in Otolaryngology, Harvard Medical School; Head of Otolaryngology Service, Beth Israel Hospital; Assistant in Otolaryngology, Massachusetts Eye and Ear Infirmary; Assistant in Otolaryngology, Children's Hospital Medical Center, Boston; and John M. Kurkjian, M.D., Assistant in Otolaryngology, Harvard Medical School; Assistant in Otolaryngology, Massachusetts Eye and Ear Infirmary; Assistant Surgeon, Mount Auburn Hospital; Assistant Surgeon, Symmes Arlington Hospital, Boston. 92 pp. Illustrated. Price $26.50. C. V. Mosby Company, Saint Louis, 1966.

Shock: Pharmacological principles in treatment. By Robert J. Marshall, M.D., M.R.C.P., M.R.C.P.I., Professor of Medicine and Head, Division of Cardiology, West Virginia University School of Medicine, Morgantown, West Virginia; and Thomas D. Darby, Ph.D., Pharmacologist, Abbott Laboratories, North Chicago, Illinois; Formerly Associate Professor of Pharmacology, West Virginia University School of Medicine, Morgantown, West Virginia. 99 pp. Illustrated. Price $5.50. Charles C Thomas, Springfield, Ill., 1966.

The traveler's medical guide for physicians. By B. H. Kean, M.D., F.A.C.P., Clinical Professor of Medicine (Tropical Medicine), Cornell University Medical College; Consultant, The Ford Foundation; The Travelers Health Institute and the Development and Resources Corporation; and Harold A. Tucker, M.D., F.A.C.P., Director of Medical Services, Pago Pago, Tutuila, American Samoa; Formerly: Assistant Professor of Bacteriology and Parasitology, University of Southern California School of Medicine. 421 pp. Illustrated. Price $12.50. Charles C Thomas, Springfield, Ill., 1966.

It all started with Hippocrates. By Richard Armour. 136 pp. Illustrated. Price $3.95. McGraw-Hill Book Company, New York, Toronto, London, Sydney, 1966.

Peridural analgesia and anesthesia. By P. C. Lund, M.D., F.A.C.A., Director, Department of Anesthesiology, Conemaugh Valley Memorial Hospital, Johnstown, Pennsylvania; Assistant Clinical Professor of Anesthesiology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania. 379 pp. Illustrated. Price $13.50. Charles C Thomas, Springfield, Ill., 1966.

Serological diagnostix. By Lucio Nuzzolo, M.S., L.D., Assistant, Istituto di Clinica, Medica Generale e Metodologia Clinica, Universita di Roma, Rome, Italy. 124 pp. Illustrated. Price $6.75. Charles C Thomas, Springfield, Ill., 1966.

One world of science. Personal visits to men of research in many lands. By Warren Andrew, Ph.D., M.D., Chairman, Department of Anatomy, Indiana University Medical School, Indianapolis, Indiana. 271 pp. Illustrated. Price $8.75. Charles C Thomas, Springfield, Ill., 1966.

Condition critical: our hospital crisis. By Edwin P. Hoyt. 264 pp. Price $5.95. Holt, Rinehart and Winston, New York, Chicago, San Francisco, 1966.

New hope for your skin. By Irwin I. Lubowe, M.D., F.A.C.S., Associate Dermatologist, Metropolitan Hospital Center, Associate Dermatologist, Flower and Fifth Avenue Hospital, New York. 264 pp. Illustrated. Price $.75. Pocket Books, Inc., New York, 1966.

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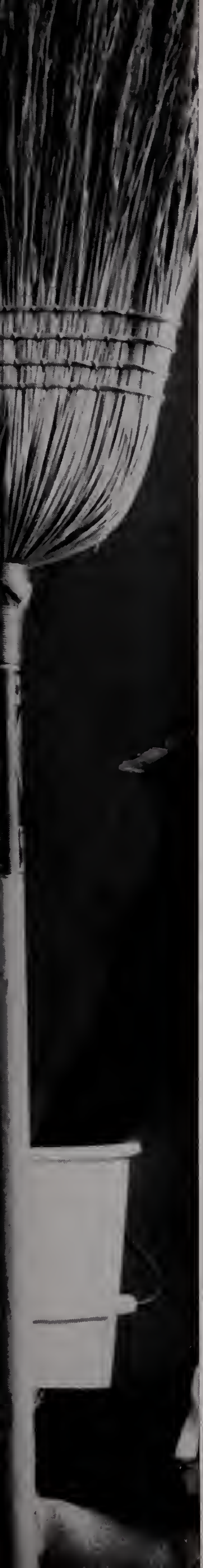

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> Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.
>
> May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

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OREGON

Baker
Pres., Charles A. Grant, Baker
Sec., Menzie McKim, Jr., Baker
First Tuesday—7 p.m.—St. Elizabeth Hospital Staff Room, Baker

Benton
Pres., G. Louis Freeark, Corvallis
Sec., Thomas K. Griffith, Corvallis
First Monday—6:30 p.m.—Country Kitchen, Corvallis

Central Oregon
Pres., Neal A. Goldsmith, Bend
Sec., William J. Ellis, Bend
First Monday—7:30 p.m.,—Pine Tavern, Bend.

Clackamas
Pres., Roy E. Cochran, Oregon City
Sec., Gey Weeks, Oregon City
Second Tuesday—6:30 p.m.—Seid's Restaurant, Oregon City

Clatsop
Pres., Richard G. Kettlekamp, Astoria
Sec., Leroy W. Steinmann, Astoria
No regular schedule

Columbia
Pres., George E. Muehleck, Jr., St. Helens
Sec., O. L. Zeschin, St. Helens
First Tuesday—8 a.m.,—Columbia District Hospital, St. Helens

Douglas
Pres., T. R. Mafit, Roseburg
Sec., Gerald L. Casebolt, Roseburg
Second Tuesday—6:30 p.m.—Roseburg Country Club

Jackson
Pres., John T. Weisel, Medford
Sec., William R. Stewart, Medford
Second Wednesday—7:30 p.m.—Rogue Valley Country Club

Josephine
Pres., Joseph D. Schweinfurth, Grants Pass
Sec., Robert M. Gilbert, Grants Pass
Time and location by announcement

Klamath
Pres., Gerold J. Nicholson, Klamath Falls
Sec., Sam Bennett, Klamath Falls
Second Tuesday—7 p.m.—Molatore's Restaurant, Klamath Falls

Lake
Pres., William J. Strieby, Lakeview
Sec., Joycelin H. Robertson, Lakeview
Second and Fourth Tuesdays

Lane
Pres., Richard E. Turner, Springfield
Sec., T. F. Brinton, Eugene
First Tuesday—6:30 p.m.—Eugene Hotel

Lincoln
Pres., Ernest A. Yeck, Newport
Sec., Matthew Gruber, Toledo
Third Tuesday

Linn
Pres., Carl S. Yaillen, Albany
Sec., D. Robert Bartell, Albany
Location Announced

Malheur
Pres., John D. Sigurdson, Ontario
Sec., James A. Mann, Ontario
Quarterly

Marion-Polk
Pres., Robert F. Anderson, Salem
Sec., George V. Squire, Salem
Third Tuesday—6:30 p.m.—Marion Motor Hotel, Salem

Mid-Columbia
Pres., Leonard L. Hoffman, Hood River
Sec., James B. Wade, Hood River
Second Tuesday—6:30 p.m.—Alternate between Hood River and The Dalles

Multnomah
Pres., Louis O. Machlan, Jr., Portland
Sec., George M. Robins, Portland
First Tuesday

Southwestern Oregon
Pres., Amelia H. Lipton, Coos Bay
Sec., Donald E. Poage, Coos Bay
First Wednesday—12 Noon—Courtel, Coos Bay

Tillamook
Pres., Harry G. Beckwith, Jr., Wheeler
Sec., Irvin J. Schneider, Wheeler
Second Thursday—7 p.m.—Victory House, Tillamook

Umatilla-Morrow
Pres., Carl W. Calhoun, Pendleton
Sec., Howard Johnson
Third Tuesday—7:30 p.m.—Pendleton Country Club

Union-Wallowa
Pres., John E. Indihar, Jr., La Grande
Sec., Wesley I. Allen, La Grande
On call of President

Washington
Pres., Leo L. Bauer, Hillsboro
Sec., Robert C. Cowger, Beaverton
First Monday—8 p.m.—Forest Hill Golf Course

Yamhill
Pres., Stanley D. Kern, Newberg
Sec., Leonard Silvers, Newberg
First Tuesday—7 p.m.—Oriental Garden, McMinnville

WASHINGTON

Benton-Franklin
Pres., Richard A. Pettee, Richland
Sec., Arnold E. Ritt, Kennewick
Third Tuesday—6:30 p.m.—Desert Inn, Richland; or Black Angus Motel, or Bellarina Motel, Kennewick (except June, July, Aug.)

Chelan
Pres., E. A. Meyer, Cashmere
Sec., G. E. Quinby, Wenotchee
First Monday—6:30 p.m.—Wenatchee Golf and Country Club

Clallam
Pres., F. B. Symonds, Port Angeles
Sec., J. F. Standord, Sequim
Third Monday—8 p.m.—Clallam County Physician Service, Pt. Angeles

Clark
Pres., John F. Vaughan, Vancouver
Sec., Paul O. Kretschmar, Vancouver
First Tuesday—6:30 p.m.—Royal Oaks Country Club, Vancouver

Cowlitz
Pres., James P. Donnelly, Longview
Sec., Dale A. Bowen, Longview
Third Tuesday—6:30 p.m.—Bart's Charcoal Broiler, Longview

Grant
Pres., John W. Trantow, Quincy
Second Monday—7:30 p.m.—Moses Lake or Ephrata

Grays Harbor
Pres., Paul M. Mickens, Elma
Sec., C. Timothy Smith, Aberdeen
Third Wednesday—6:30 p.m.—Grays Harbor Country Club

Jefferson
Pres., Bruce N. Brydges, Port Townsend
Sec., Clayton M. Schaill, Port Townsend
Second week—rotate between members' homes

King
Pres., Richard C. Greenleaf, Seattle
Sec., Wayne A. Chesledon, Seattle
First Monday (May, Oct., Dec.)

Kitsap
Pres., R. W. Merley, Port Orchard
Sec., E. W. Creelman, Bremerton
Second Monday—6:30 p.m.—Hearthstone, Bremerton

Kittitas
Pres., H. Cary Coppock, Ellensburg
Sec., J. William Devney, Ellensburg
First Monday, Mar., June, Dec.; 2nd Monday, Sept.—7:30 p.m.—Elks Temple, Kittitas

Klickitat-Skamania
Pres., Gerard J. Timmer, Goldendale
Sec., Neal R. Thompson, Goldendale
Quarterly Meetings—8:30 p.m.—Klickitot Valley Hospital

Lewis
Pres., Alfred R. Twiss, Centralia
Sec., W. J. Dugaw, Toledo
Second Monday—8 p.m.—Local hospital in Chehalis or Centraila, alternately

Lincoln
Pres., Marshall W. Thompson, Davenport
Sec., Walter C. Felsenstein, Ritzville
Three times annually—Harrington, Odessa, Wilbur

Okanagan
Pres., Lyle J. Cowan, Omak
Third Thursday of month

Pacific
Pres., D. C. MacDonald, Raymond
Sec., J. C. Proffitt, South Bend
Second Wednesday—6:30 p.m.—Bridges Inn, Raymond

Pierce
Pres., Charles P. Larson, Tacoma
Sec., Arnold J. Herrmann, Tacoma
Second Tuesday—B:15 p.m.—Medical Arts Building Auditorium, Tacoma

Skagit-Island
Pres., H. Worley, Mt. Vernon
Sec., G. H. Hoffman, Mt. Vernon
Fourth Monday—7 p.m.—Dale's Restaurant, Mt. Vernon

Snohomish
Pres., Schuyler M. Bissell, Everett
Sec., John P. Nolon, Everett
First Tuesday—7:30 p.m.—Everett Golf and Country Club

Spokane
Pres., Arthur B. Croig, Spokane
Sec., Roy Lindberg, Spokane
Fourth Tuesday—time and time announced, Spokane

Stevens
Pres., John E. Barrett, Chewelah
Sec., Merle B. Snyder, Chewelah
First Tuesday—8 p.m.—Chewelah and Colville hospitals alternately

Thurston-Mason
Pres., Richard E. Grant, Lacy
Sec., Robert D. Cunningham, Shelton
Fourth Tuesday, Tyee Motor Inn, Olympia

Walla Walla Valley
Pres., John R. Cranor, Walla Walla
Sec., Robert M. Bond, Walla Walla
Second Thursday, 6:30 p.m.—Marcus Whitman Hotel

Whatcam
Pres., Ed L. Brinson, Bellingham
Sec., J. R. Stancil, Bellingham
First Monday (except June, July, Aug.) —6:30 p.m.—Leopold Hotel, Bellingham

Whitman
Pres., Betty K. Adams, Pullman
Sec., H. R. Gahler, St. John
Third Tuesday each month

Yakima
Pres., Paul W. Rider, Yakima
Sec., Bruce H. Hudson, Yakima
Second Tuesday (except June, July)—6:30 p.m.—Elk's Golf and Country Club

27th
Pres., R. C. John Pearson, Seattle
Sec., Hylan C. Moore, Seattle
First Wednesday—8 p.m.—Swept Wing Inn, Seattle

IDAHO

Ada
Pres., Gustav E. Rosenheim, Boise
Sec., John M. Ocker, Jr., Boise
Third Tuesday—12:30 p.m.—Ranch Club, Boise

Bear River
Pres., Glenn W. Schoper, Monpelier
Sec., Reed Rich, Montpelier
First Friday—7:30 p.m.—alternating between Preston, Soda Springs and Montpelier

Bonner-Boundary
Pres., W. C. Hayden, Sandpoint
Sec., Fred E. Marienau, Sandpoint
On call of president

Idaho Falls
Pres., R. Reed Fife, Idaho Falls
Sec., Byran T. Weeks, Idaho Falls
Every other month, Stardust Motel Restaurant, Idaho Falls

Kootenai-Benewah
Pres., Wilbur H. Lyon, Jr., Coeur d'Alene
Sec., Jane K. Gumprecht, Coeur d'Alene
First Tuesday—6:30 p.m.—Log Cabin Cafe

North Idaho
Pres., D. J. Soltman, Grangeville
Sec., E. M. Baldeck, Lewiston
Third Wednesday each month

Shoshone
Pres., E. E. Gnoedinger, Wallace
Sec., G. M. Whitesel, Kellogg
Monthly meetings, Doctor's Clinic, Kellogg

South Central
Pres., C. R. McWilliams, Twin Falls
Sec., H. Thad Scholes, Twin Falls
Second Tuesday—(Feb., May, Sept., Nov.) 7:30 p.m.—place varies

Southeastern Idaho District
Pres., Richard K. Gorton, Pocatello
Sec., David C. Miller, Pocatello
First Thursday—Pocatello

Southwestern Idaho District
Pres., Oaks H. Hoover, Caldwell
Sec., A. L. Poulsen, Caldwell, Nampa
Monthly on call

Upper Snake River
Pres., A. C. Truxal, Rexburg
Sec., R. G. Mabey, Rexburg
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Physicians

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FOR SALE—Picker X-ray Unit, 15 ma. space 85 KVP. 110 volt. Call Lou Jones. AD 2-6500.

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Encyclopedia for medical assistants. Edited by Louis Brachman, M.D., Associate Clinical Professor, Marquette University, School of Medicine; National Medical Director, Career Academy, School of Medical Assistant. 448 pp. Illustrated. N.P. Cathedral Square Publishing Company, Milwaukee, Wis., 1965.

Ionic conduction in hydrogen-bonded solids. By E. J. Murphy. Editor, Harold E. Whipple. 725-738 pp. Illustrated. Price $1.50. New York Academy of Sciences, 1965.

Mucus in invertebrates-collected paper. By J. A. Arcadi et al. Editor, Harold E. Whipple. 899-1070 pp. Illustrated. Price $4. New York Academy of Sciences, 1965.

New issues in infant development. B. M. Caldwell et al. Editor, Harold E. Whipple. 783-866 pp. Illustrated. Price $4. New York Academy of Sciences, 1965.

Molecular biology of gram-negative bacterial lipopolysaccharides. By G. A. Adams et al. Editor, Edward M. Weyer. 278-786 pp. Illustrated. Price $10. New York Academy of Sciences, 1966.

The laminar flow of a composite fluid; an approach to the rheology of blood. By Yves Nubar. Editor, Edward M. Weyer. 35-37 pp. Illustrated. Price $2. New York Academy of Sciences, 1966.

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Meetings OF MEDICAL SOCIETIES

AMA Annual—June 18-22; Atlantic City, 1967; San Francisco, 1968.

AMA Clinical—Houston, 1967; Miami Beach, 1968.

Idaho State Medical Association—June 28-July 1, 1967, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society—
Pres., Jack M. Docter, Seattle
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy
Pres., Wallace Lindahl, Seattle
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association—
Pres., Frank C. Henry, Seattle
Sec., L. H. Garland, San Francisco
Feb. 13-16, 1967, Sun Valley

**Oregon Medical Association—
Portland.**

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

**Washington State Medical Association—
Sept. 10-13, 1967, Seattle**

West Coast Allergy Society—
Pres., John S. O'Toole, Riverside
Sec., Roy L. Matteri, Portland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.).
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres. G. F. Starr, Eugene
Sec., K. D. McMilan, Eugene

Oregon Radiological Society—University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Raphael B. Durfee, Portland
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society—Quarterly Meetings, Congress Hotel
Pres., Gerald Whitlock, Portland.
Sec., Emerson J. Collier, Portland.

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland.
Sec., David Sellers, Portland

Portland Academy of Pediatrics—1st Monday
Pres., George Nash, Portland
Sec., R. J. Meechan, Portland.

Portland Academy of Psychiatry — Fourth Tuesday except. Dec., Jun., Jul., Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May).
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland.

UOMS Alumni Association
Annual Meeting, April 5-7, 1967
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract.—4th Mon., exc. June, July, Aug., Dec.
Pres., Donald McLaughlin, Seattle
Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto.—3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Frederick F. Ackerman, Seattle
Sec., D. F. Milam, Jr., Bellevue

Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Glen E. Hayden, Seattle
Sec., Harry A. Kettering,
Mercer Island

Seattle Pediatric Society—3rd Friday (Sept.-May), Arctic Club
Pres., Charles Kaplan, Seattle
Sec., Richard Dion, Seattle

Seattle Surg. Soc.—4th Mon. (Sept.-June) annual meeting
Pres., Frank C. Henry, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn, Annual—March 4, 1967
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society — Quarterly
Pres., Charles R. Cavanaugh, Jr., Spokane

Tacoma Academy of Internal Medicine—4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle.
Sec., John E. Nelson, Seattle

Washington Academy of General Practice, Scientific Session, May 25-27, 1967, Seattle
Pres., Charles C. Strong, Vancouver
Sec., Wm. A. Ehlers, Lacey

Washington State Radiological Society —Seattle, Quarterly
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists
Pres., Richard J. Ward, Seattle
Sec., Philip Bridenbaugh, Spokane

Wash. St. Soc. of Allergy.
Pres., Paul Van Arsdel, Jr., Seattle.
Sec., S. H. Tarica, Seattle.

Yakima Surgical Society—Last Thursday (Sept.-May)
Pres., Frank LeCocq, Yakima
Sec., John Harrington, Yakima

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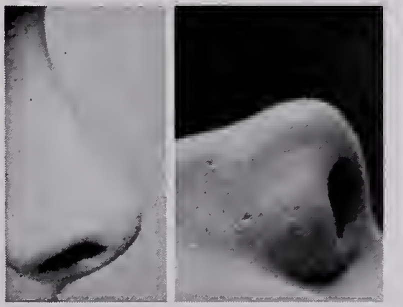

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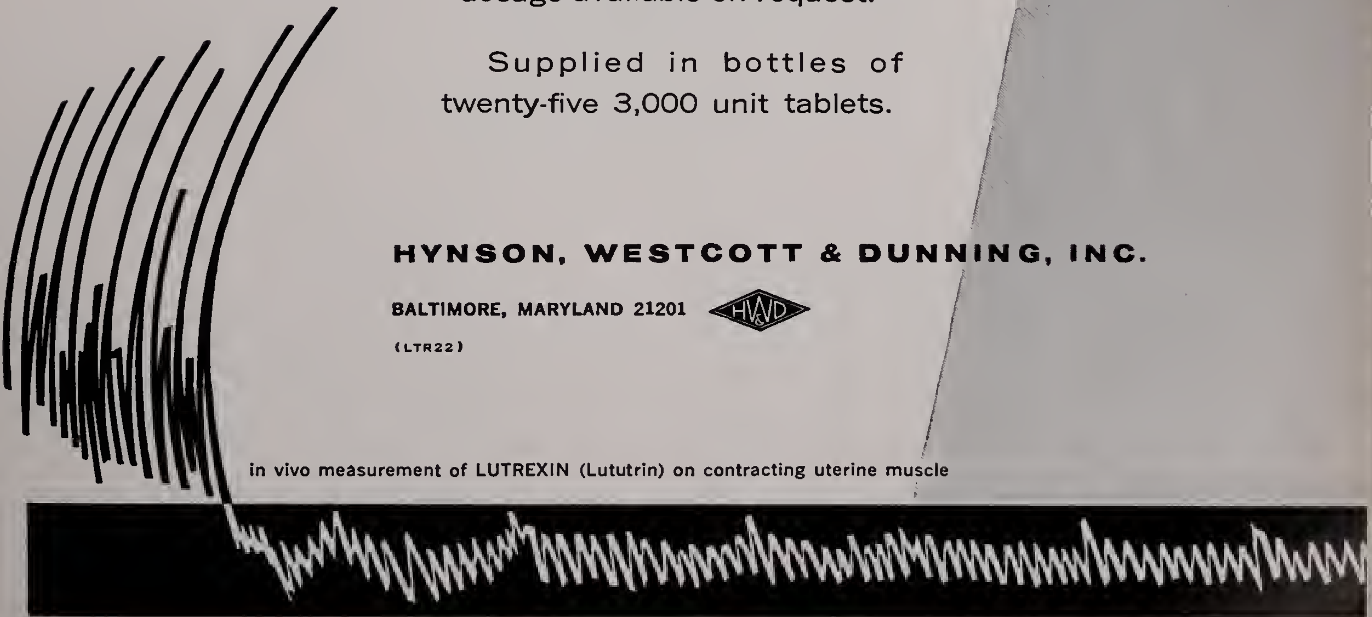

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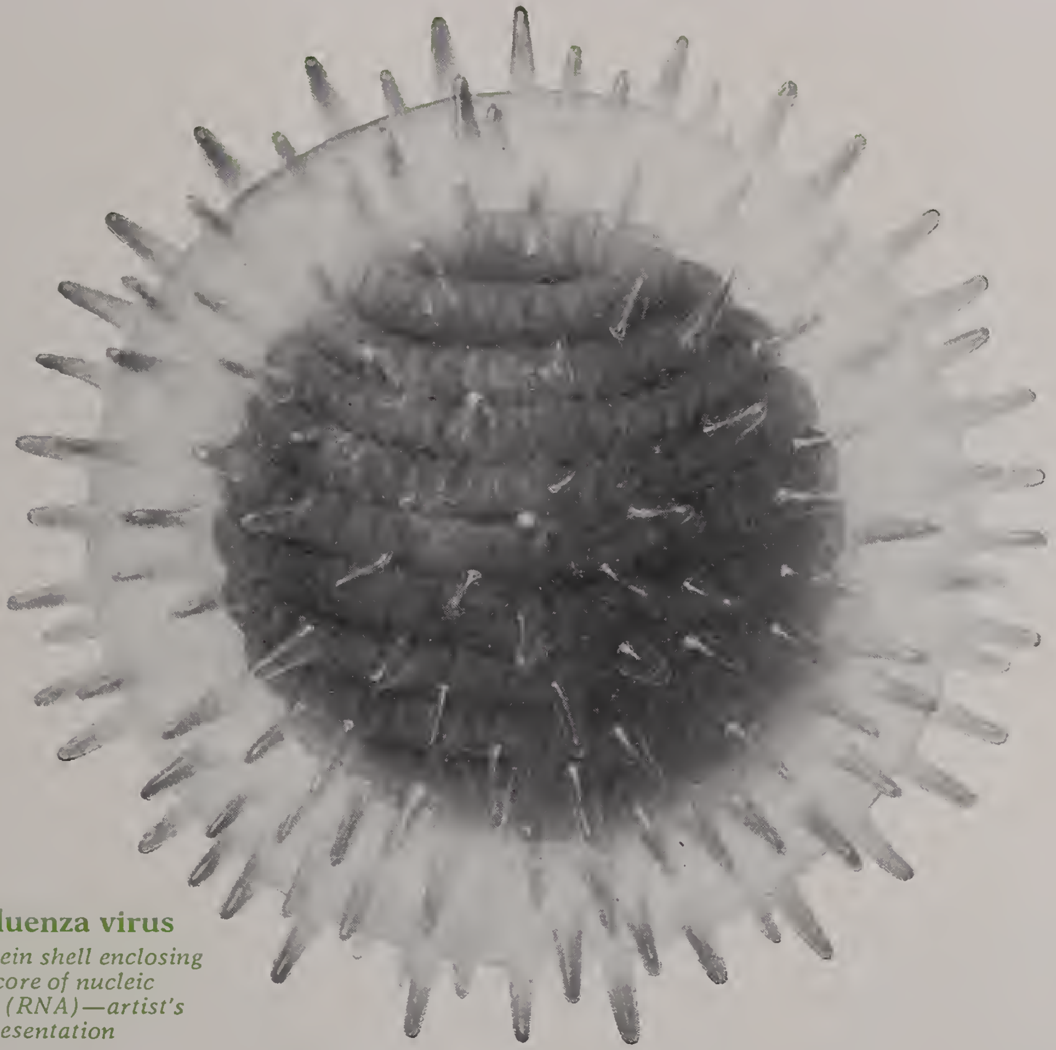
New from Du Pont
Symmetrel®
(Amantadine HCl)

The first oral chemical virostat for the prevention of influenza A_2



Influenza virus
Protein shell enclosing the core of nucleic acid (RNA)—artist's representation

The incidence of influenza A_2. In this country, where influenza is one of the leading causes of morbidity, influenza A_2 (Asian) continues to be a serious medical problem. In 1957 influenza A_2 was responsible for approximately 40,000 excess deaths in a three-month period. Since that year the most prevalent influenza virus has been A_2 (Asian).

What is Symmetrel®? "Symmetrel" (amantadine HCl) is a new synthetic chemical which acts as a molecular barrier to virus penetration. It provides for the first time specific oral medication for the prevention of respiratory infections caused by influenza A_2 (Asian) viruses—an entirely new approach in preventive medicine.

For prescribing information, see last page of this presentation

What Symmetrel® (amantadine HCl) means to you

...the first and only oral chemical agent to prevent influenza A_2 (Asian).

...not a vaccine or antibiotic, but a new synthetic chemical unrelated to any other chemotherapeutic agent.

...unique mode of action: prevents virus penetration of the host cell without affecting vital cell functions.

...,specifically active against all influenza A_2 viruses tested to date.

...not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

...does not interfere with normal antibody response; acts in concert with pre-existing antibody.

What Symmetrel® means to your patient

...possible immediate influenza A_2 protection when taken following suspected contact.

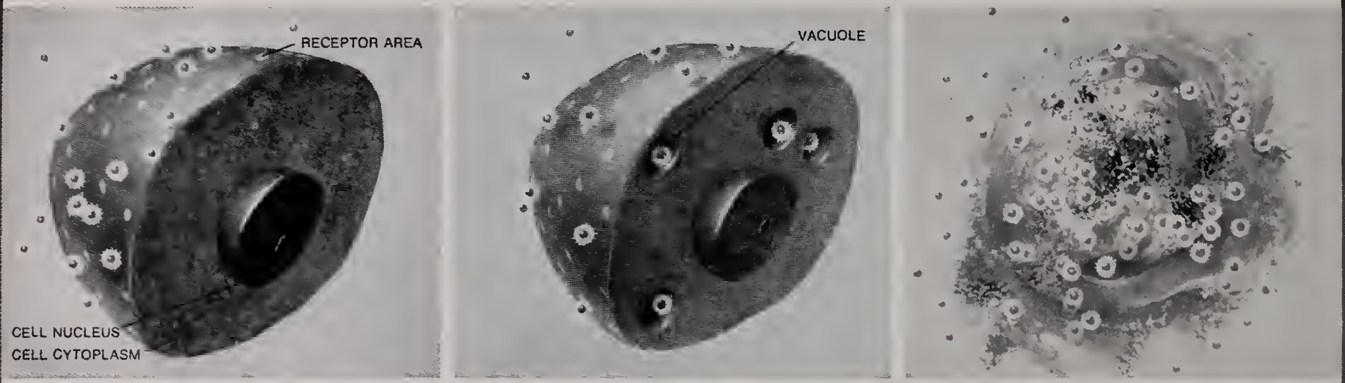
...may be particularly useful during outbreaks or epidemics and for high-risk patients in whom the occurrence of influenza A_2 is especially hazardous.

...a high degree of safety in clinical use.

...simple once daily or b.i.d. dosage.

The mode of action of Symmetrel®

How the influenza virus invades and destroys the untreated cell

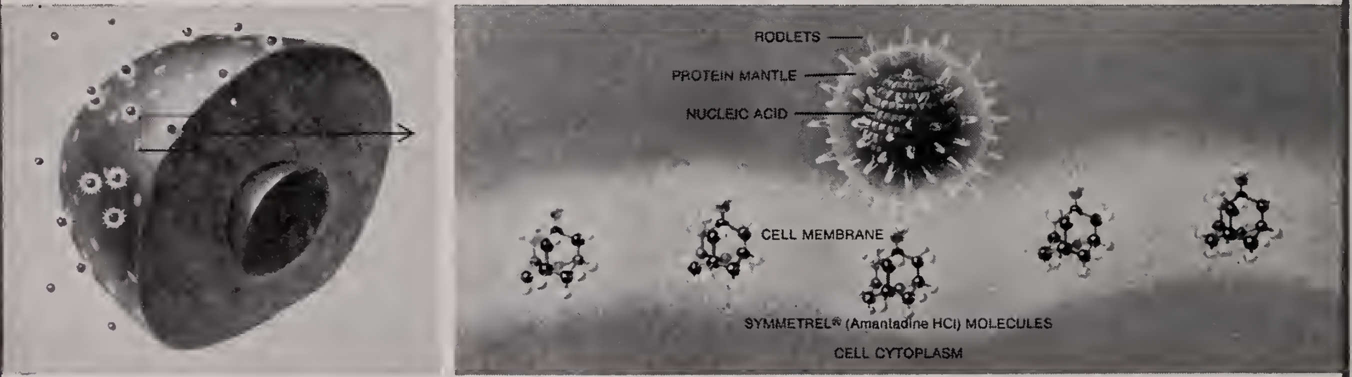


1 Viruses outside the cell attach themselves to specific cell receptor areas

2 The virus is incorporated into a vacuole within the cell. From this vacuole the virus nucleic acid passes into the cell cytoplasm

3 The virus nucleic acid then directs the cell to produce both new virus nucleic acid and virus protein coat material which aggregate to form new virus particles. This process leads to the release of new virus particles and eventual destruction of the cell

How Symmetrel® (Amantadine HCl) prevents virus invasion[1]



Our current knowledge leads us to believe "Symmetrel" acts as a molecular barrier to influenza virus penetration. Shown here in a greatly enlarged section, "Symmetrel"—located at the cellular membrane—effectively prevents (blocks) virus penetration. Thus, "Symmetrel" does not directly destroy the virus particle but acting as a virostat prevents the cycle of virus penetration, virus replication, and cell destruction that is characteristic of virus invasion of animal cells (tissue). *Artist's conception based on current scientific knowledge.*

1. "Mode of Action of the Antiviral Activity of Amantadine in Tissue Culture", Hoffmann, C. E.; Neumayer, E. M.; Haff, R. F.; and Goldsby, R. A., Journal of Bacteriology *90*,623 (1965).

Safety of Symmetrel® Confirmed. When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Prescribing Information

Indications: "Symmetrel" is indicated for the prevention (prophylaxis) of influenza A_2 in persons of all age groups. Early use is recommended, preferably before or as soon as possible after actual or suspected contact with individuals suffering from influenza A_2. "Symmetrel" should especially be considered for high influenza-risk patient groups such as those suffering from chronic debilitating diseases and elderly persons.

Contraindications: Not indicated for the prevention of influenzal or respiratory illness other than influenza A_2 or for the treatment of established disease.

Warnings: Administration to patients with central nervous system disease, particularly geriatric patients with cerebral arteriosclerosis, and patients with a history of epilepsy or other "seizures," requires strict observation for possible untoward effects (see Adverse Reactions). Patients taking psychopharmacologic drugs, central nervous system stimulants, or alcoholic beverages should be observed for possible evidence of intolerance. Those patients who experience central nervous system effects or blurring of vision should be cautioned against driving or working in situations where alertness is important.

No teratogenic effects have been seen in reproductive studies in rats and rabbits. Studies in pregnant women have, however, not been done and use of this drug in women of childbearing age should be undertaken only after weighing the possible risks to the fetus against benefit to the pregnant patient. It should not be administered to nursing mothers since it is not known whether the drug is secreted in the milk.

Precautions: Ineffective against bacterial infections. Patients should be observed for idiosyncratic reactions as with all new drugs. Geriatric patients with pre-existing serious medical illnesses with mental or physical deterioration should be followed carefully medically while taking "Symmetrel." (See Adverse Reactions.)

Adverse Reactions: With higher than indicated doses manifestations of central nervous system effects such as nervousness, insomnia, dizziness, lightheadedness, drunken feeling, slurred speech, ataxia, inability to concentrate and some psychic reactions including depression and feelings of detachment were seen. Occasional blurred vision was reported at higher doses. Some of the milder and less pronounced symptoms above have been reported in a small number of patients taking the recommended dosage of 200 mg per day. Those were mostly transient and disappeared with continued administration of the drug. Some geriatric patients developed paranoid or hallucinatory behavior and became unmanageable while taking 200 mg daily. Medically unselected seriously deteriorated geriatric patients showed poor clinical tolerance after several weeks of daily dosing with 200 mg per day. One elderly patient with a history of prior cerebrovascular accident developed visual hallucinations and grand-mal convulsions while on drug at 800 mg per day. Some cases of dry mouth, gastrointestinal upset and skin rash and rarely, tremors, anorexia, pollakiuria, and nocturia have been also reported.

Safety: When used as indicated, is generally well tolerated. No kidney, liver, bone marrow, or hematological disturbances have been observed.

Dosage: *Adults:* Two 100 mg capsules (or 4 teaspoonfuls of syrup) as a single daily dose or the daily dose may be divided into one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

Children: 1 yr.—9 yrs. of age: Calculate total daily dose on the basis of 2 mg to 4 mg per pound of body weight per day (but not to exceed 150 mg per day). Daily dose, given as the syrup, should be given in 2 or 3 equal portions.

9 yrs.—12 yrs. of age: Total daily dose 200 mg given as one capsule of 100 mg (or 2 teaspoonfuls of syrup) twice a day.

How Supplied: *Capsules:* Bottles of 100. Each red, gelatin capsule contains 100 mg amantadine HCl. *Syrup:* Bottles of 1 pint. Each 5 ml (1 teaspoonful) contains 50 mg amantadine HCl.

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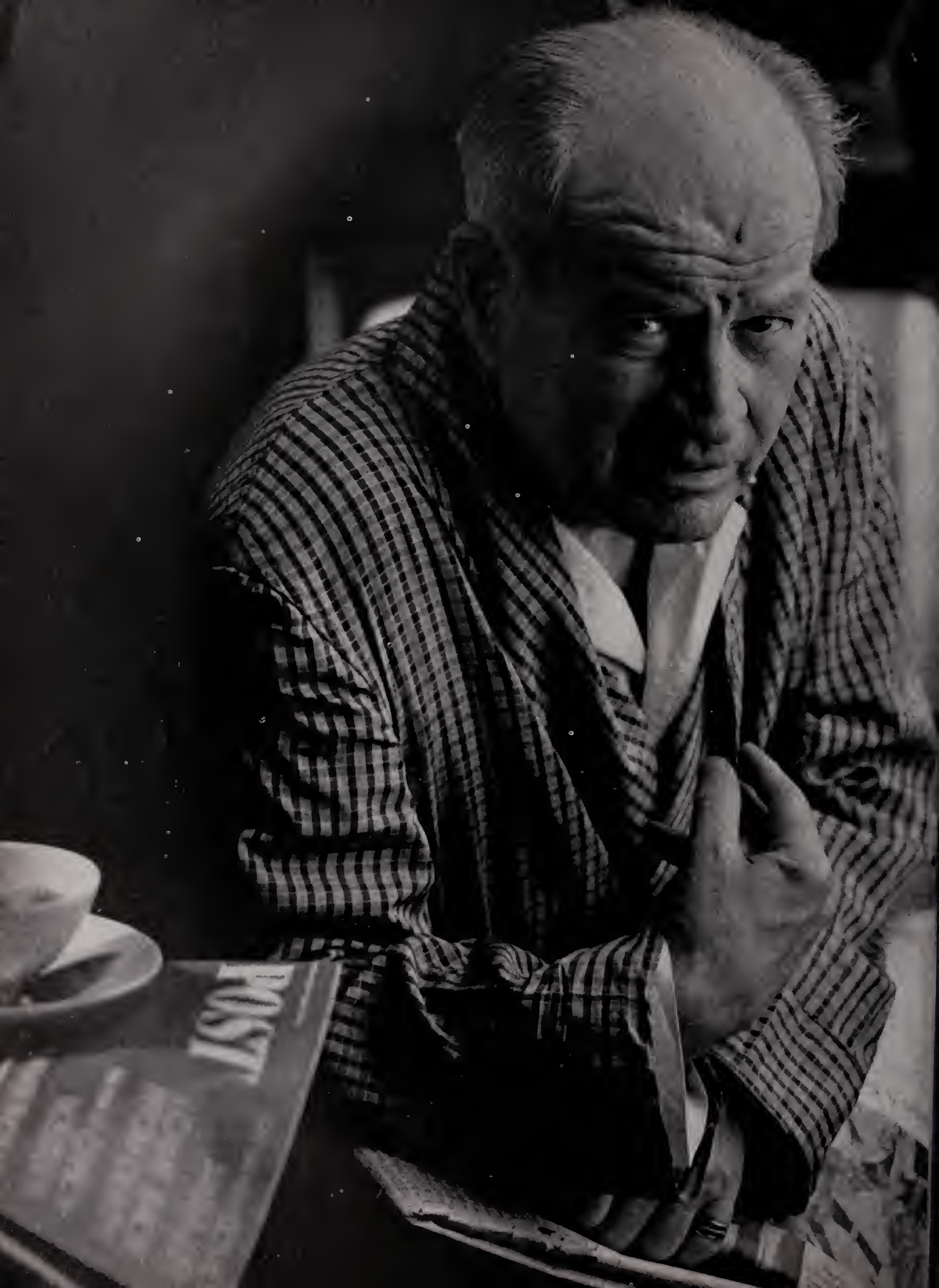
Symmetrel®

(Amantadine HCl)

A molecular barrier to virus penetration



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picture taken May 26, 1963
Love Mom

These are photographs borrowed from the files of a Missouri physician. The grossly overweight patient pictured in August 1962 succeeded in shedding 110 pounds in the following ten months by adhering to a diet program under the supervision and encouragement of her physician. To help control her desire for food and also "burn off" additional calories, the physician recommended Obestat, one tablet a day. Doctor and patient admit that Obestat fortified her determination to stick to the diet during the difficult weeks of adjustment.

Obestat can help your overweight patient break the eating habits that cause obesity.

Obestat suppresses appetite.

Obestat boosts metabolism.

Obestat offsets emotional symptoms.

Each OBESTAT TY-MED* tablet or capsule contains: Methamphetamine hydrochloride 10 mg./Amobarbital (Warning, may be habit forming) 60 mg./Thyroid 150 mg.

*Lemmon brand of timed-release medication.

Dosage: One Obestat Ty-Med tablet or capsule daily, taken before breakfast, is satisfactory for most patients. Occasionally, 2 tablets or capsules may be required.

Side Effects: Side effects such as headache, dizziness, nervousness, excitability, insomnia, dyspnea, palpitation or gastrointestinal distress are infrequent and usually mild.

Precautions: An increase in blood pressure or basal metabolic rate should be observed carefully.

Contraindications: Myocardial or coronary disease, diabetes, marked hypertension, hyperthyroidism or idiosyncrasy to the ingredients.

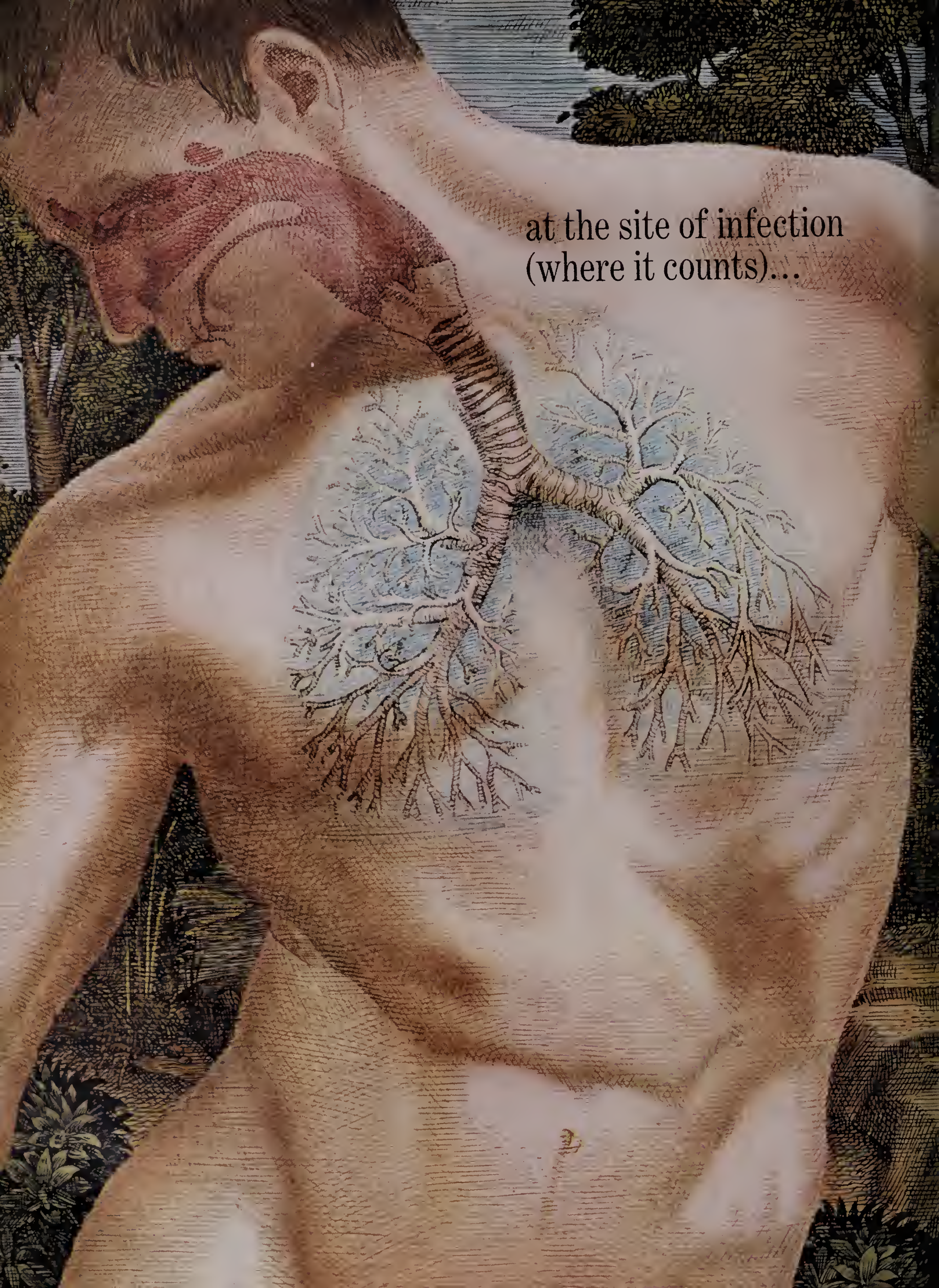
Supplied: Bottles of 30, 100 and 1000 tablets or capsules.

Caution: Federal law prohibits dispensing without prescription.

References: Ort, F.: Adjuvant treatment of obesity with an anorectic-calorigenic agent, Clin Med 70:1999 (Nov) 1963. Isenberg, C. L.: Treatment of the overweight patient in general practice, Clin Med 72:663 (Apr) 1965. ©1966 HAACK 1-66 MADE IN U.S.A.

HAACK LABORATORIES, INC.
DIVISION OF LEMMON PHARMACAL CO., PORTLAND, OREGON 97208

Obestat helps.


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®
Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/ the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.
Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247:*69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12:*398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239:*198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

700121

New
low-cost tetracycline/antifungal therapy

for broad-spectrum activity
plus specific antifungal prophylaxis
at significant patient savings

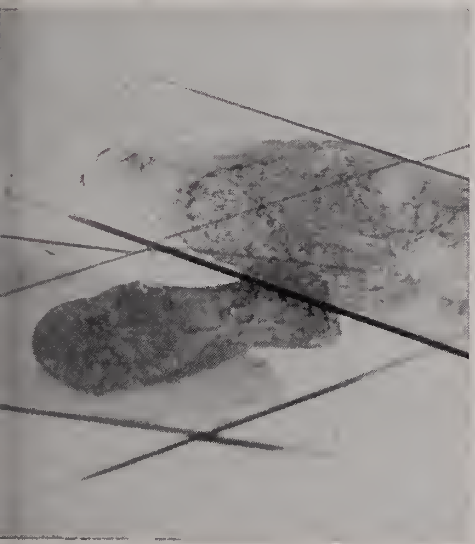
Whenever tetracycline is indicated in these candidates for Candida:

1. diabetic patients

2. nonpregnant women with a history of recent or recurrent monilial vaginitis

3. elderly or debilitated patients

4. patients with a past history of moniliasis



5. patients on long-term tetracycline or corticosteroid therapy

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood.) *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York

Tetrex-F®

Each capsule contains tetracycline phosphate complex equivalent to tetracycline hydrochloride 250 mg. and nystatin 250,000 units.

new from Ames
5 basic uro-analytical
facts in 30 seconds

Labstix®
BRAND REAGENT STRIPS

...broadest urine screening possible from a single reagent strip

Urine test results with Labstix Reagent Strips can represent significant guides to differential diagnosis or therapy in many conditions. An unexpected "positive" may enable you to detect hidden pathology—long before more recognizable symptoms become evident. Negative results, which permit you to rule out abnormalities in a broad clinical range, can serve as baseline values for reference in future examinations. The 5 colorimetric test areas encompassed on Labstix Reagent Strips are:

pH—values are read numerically in the essential range of pH 5 to pH 9.

Protein—results are read either in the "plus" system or in mg. % in amounts approximating "trace," 30, 100, 300, and over 1000 mg. %.

Glucose—provides a "Yes-or-No" answer for urine "sugar spill."

Ketones—detects ketone bodies in urine—**both** acetoacetic acid and acetone. Reacts with as little as 5 to 10 mg. % of acetoacetic acid.

Occult Blood—specific test for intact red cells, hemoglobin or myoglobin. Results are read as negative, small, moderate or large amounts.

Now a Clear Reagent Strip of Firm Construction

...facilitates handling during testing procedure. Excellent color contrast made possible by the clear plastic strip, together with the clearly defined color charts provided, permits precise, reproducible colorimetric readings in all 5 test areas. A more definitive interpretation of uro-analytical facts is made possible.

Available: Labstix Reagent Strips, bottles of 100 (color charts are supplied with each bottle).

Ames Company, Inc., Elkhart, Indiana

AMES

08165

"Yes, Doctor, the pain is gone."

■ Despite introduction of synthetic substitutes, efficacy of 'Empirin' Compound with Codeine remains unchallenged.

'Empirin'® Compound with Codeine Phosphate gr. ½ No. 3
Each tablet contains: Codeine Phosphate gr. ½ (Warning—May be habit forming), Phenacetin gr. 2½, Aspirin gr. 3½, Caffeine gr. ½.

Keeps the Promise of Pain Relief

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

In peptic ulcer... antacid therapy with a new benefit

CONTAINS A BALANCED COMBINATION OF THE MOST WIDELY USED ANTACIDS—FOR RAPID NEUTRALIZATION. PLUS SIMETHICONE—TO CONTROL THE FACTOR WHICH ANTACIDS ALONE CANNOT INFLUENCE.

Mylanta®

- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
- The nonfatiguing flavor and smooth, nongritty consistency of tablets and liquid encourage continued patient cooperation during long-term therapy.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.

Stuart

When the stagnant sinus must be drained...

Transillumination of the sinuses – diffuse shadow on right side of face indicates unilateral maxillary sinusitis.

In the common cold, Neo-Synephrine is unsurpassed for reducing nasal turgescence. It stops the stuffy feeling at once. It opens sinus ostia to re-establish drainage and lessen the chance of sinusitis. With Neo-Synephrine, in the concentrations most commonly used, decongestion lasts long enough for extended breathing comfort, without endangering delicate respiratory tissue. Systemic side effects are virtually unknown. There is little rebound tendency.

Winthrop Laboratories, New York, N.Y. 10016 Winthrop

Neo-Synephrine® HCl

Brand of phenylephrine hydrochloride

is available in a variety of forms, for all ages:

⅛% solution for infants
¼% solution for children and adults
¼% pediatric nasal spray for children
½% solution for adults
½% nasal spray for adults
½% jelly for children and adults
1% solution for adults (resistant cases)

Also NTZ® Solution or Spray
Antihistamine-decongestant

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming	21 mg.
Ephedrine HCl	16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Tandearil®
oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.

Geigy

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

Geigy

Tandearil® oxyphenbutazone helps osteoarthritic joints move again

	3 out of 4 osteoarthritics completely or markedly improved
Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964.	76.9% of 407 patients
Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966.	84.6% of 39 patients

Please see adjoining page for brief prescribing summary.

TA-4919 PC

when congestion is complicated by sulfa-susceptible bacterial invaders in the upper respiratory tract...

prescribe economical **Trisulfaminic®**

Each tablet contains: Triaminic® 25 mg. (phenylpropanolamine hydrochloride 12.5 mg., pheniramine maleate 6.25 mg., pyrilamine maleate 6.25 mg.); Trisulfapyrimidines, U.S.P. 0.5 Gm. (sulfadiazine 0.167 Gm., sulfamerazine 0.167 Gm., sulfamethazine 0.167 Gm.)

PHARMACOLOGY: Triaminic decongests and promotes drainage of nasal and paranasal passages, and prevents any further histamine-induced damage; the triple sulfonamides inhibit susceptible bacterial invaders. INDICATIONS: For congestion and infection of the upper respiratory tract caused by sulfa-susceptible organisms. DOSAGE: Adults: 2 to 4 tablets initially, followed by 2 tablets every 6 hours. Medication should be continued until patient has been afebrile for 3 days. ADVANTAGES: The advantages of Trisulfaminic in upper respiratory infections are: freedom from narcotics or alcohol; therapeutic reliability; safety; economy; ease of administration; freedom from potential sensitization to broad-spectrum antibiotics which may be reserved for lower respiratory or other infections caused by susceptible organisms. CONTRAINDICATIONS: Contraindicated in sulfonamide and antihistamine sensitivity, impaired renal function, pregnancy approaching term, and in premature infants and newborn infants during the first month of life. Do not use in patients with glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal or bladder neck obstruction. WARNING: Use only after careful evaluation in patients with liver or renal damage, urinary obstruction, or blood dyscrasias. Deaths have been reported from hypersensitivity reactions with administration of sulfonamides. In intermittent or prolonged therapy, blood counts and liver and kidney function tests should be performed periodically. Sulfonamide therapy may potentiate the hypoglycemic action of sulfonylureas. PRECAUTIONS: Use with caution in patients with histories of significant allergy or asthma. Assure an adequate fluid intake. Because the antihistamines may cause drowsiness of varying degree, warn patients about activities requiring alertness such as driving a car or operating dangerous machinery. Use with caution in the presence of hypertension, hyperthyroidism, cardiovascular disease and diabetes. ADVERSE REACTIONS: As in all sulfonamide therapy, the following reactions may occur: headache, nausea, vomiting, diarrhea, icterus, hepatitis, pancreatitis, urticaria, rash, fever, cyanosis, hematuria, crystalluria, proteinuria, blood dyscrasias, petechiae, purpura, neuropathy and injection of the conjunctiva and sclera. If one or more of these reactions occur, the drug should be discontinued. With antihistaminic therapy there have been reports of sedation varying from mild drowsiness to deep sleep, dizziness, lassitude, inability to concentrate, fatigue, incoordination, tinnitus, blurred vision, diplopia, euphoria, nervousness, insomnia, tremors, palpitation, hypotension, headache, chest tightness, urinary frequency, dysuria, tingling of the hands, dryness of the mouth, throat, and nose, gastrointestinal disturbances such as epigastric distress, anorexia, nausea, vomiting, constipation and diarrhea and very rarely, leukopenia and agranulocytosis. Adverse reactions reported with the use of sympathomimetic amines include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesicle sphincter spasm. PACKAGE INFORMATION: Trisulfaminic Tablets: Supplied in bottles of 100 tablets. CAUTION: Federal law prohibits dispensing without prescription.

DORSEY LABORATORIES · *a division of The Wander Company* · **LINCOLN, NEBRASKA**

Look how many ways

Thorazine®

brand of

chlorpromazine

can help

	Tranquilizer	Potentiator	Antiemetic
Agitation	●		
Alcoholism	●		●
Anxiety	●		
Cancer patients	●	●	●
Severe neurodermatitis	●		
Drug addiction withdrawal symptoms	●		●
Emotional disturbances (moderate to severe)	●		
Nausea & vomiting	●		●
Neurological disorders	●		
Obstetrics	●	●	●
Pain	●	●	●
Pediatrics	●	●	●
Porphyria	●	●	
Psychiatric disorders	●		
Hiccups—refractory	●		
Senile agitation	●		
Surgery	●	●	●
Tetanus	●	●	

'Thorazine' is useful as a specific adjuvant in the above named conditions.

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. *Contraindications:* Comatose states or the presence of large amounts of C.N.S. depressants. *Precautions:* Potentiation of C.N.S. depressants may occur (reduce dosage of C.N.S. depressants when used concomitantly). Antiemetic effect may mask other conditions. Possibility of drowsiness should be borne in mind for patients who drive cars, etc. In pregnancy, use only when necessary to the welfare of the patient. *Side Effects:* Occasionally transitory drowsiness; dry mouth; nasal congestion; constipation; amenorrhea; mild fever; hypotensive effects, sometimes severe with I.M. administration; epinephrine effects may be reversed; dermatological reactions; parkinsonism-like symptoms on high dosage (in rare instances, may persist); weight gain; miosis; lactation and moderate breast engorgement (in females on high dosages); and less frequently cholestatic jaundice. Side effects occurring rarely include: mydriasis; agranulocytosis; skin pigmentation, lenticular and corneal deposits (after prolonged substantial dosages).

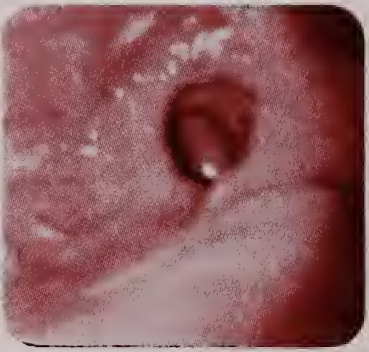
For a comprehensive presentation of 'Thorazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.

Smith Kline & French Laboratories

NEW EVIDENCE:

Pro-Banthīne® (propantheline bromide) **gives positive, selective benefits in gastrointestinal disorders.**

Intragastric photograph of pyloric region showing complete relaxation of pyloric sphincter with 6 mg. of Pro-Banthīne intravenously.



An important problem in managing gastrointestinal disorders has been the choice of an anticholinergic agent which will act positively and selectively on the gastrointestinal tract without extensive secondary effects.

Recent direct observations with the cinefibergastroscope and intragastric photography[1] visually confirm previous evidence that Pro-Banthīne does, indeed, possess such selective activity.

Barowsky and his associates demonstrated that a minimal dose of 6 to 8 mg. of Pro-Banthīne intravenously produced complete relaxation of gastric activity. Secondary effects were not significant.

By contrast, it required 0.8 mg. or double the usual dose of atropine intravenously to achieve similar gastric relaxation. Side effects of this dosage of the belladonna alkaloid were pronounced. Ventricular rates were as high as 150 per minute.

For positive, selective anticholinergic benefits Pro-Banthīne is indicated in patients with peptic ulcer, gastritis, irritable colon and other forms of gastrointestinal hypermotility.

Dosage: The maximal tolerated dosage is usually the most effective. For most *adult* patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthīne (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type ampuls of 30 mg. The parenteral dose should be adjusted to the patient's requirement and may be up to 30 mg. or more every six hours, intramuscularly or intravenously.

Contraindications: In glaucoma or severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in the elderly male with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug.

Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

[1] Barowsky, H.; Greene, L.; Bennett, R., and Buganza, G.: The Effect of Anticholinergic Drugs on Gastric Motility and Pyloric Function, Scientific Exhibit, Annual Convention of the American Medical Association, Chicago, Illinois, June 26-30, 1966.

SEARLE *Research in the Service of Medicine*

"Caveat Chirurgus"

Let the surgeon beware—the pediatric cardiologist has been quietly threatening the thoracic man's bread and butter. Elsewhere in this journal can be found an up to the minute description of current practices in the surgery of congenital heart disease and one cannot help but be impressed by the advances that have occurred in this field over the past 10 years.

Less well known, perhaps, are the concurrent advances in the understanding of the natural history of congenital heart disease. It now seems clear, for instance, that as many as 30 per cent of ventricular septal defects close spontaneously.[1] The spontaneous closures include infants who have been in heart failure as well as those with small asymptomatic defects. Spontaneous closure of a patent ductus arteriosus is much less common, but it has been demonstrated that in the case of the premature infant, large, even heart failure-producing ducts may close, up to three or more months after birth.[2] It is as if duct closure in these infants is related to the time when they should have been born. Atrial septal defects also have recently joined the ranks of "self-healing" lesions.[3]

Most ventricular septal defects will of course require surgical closure, but it is intresting to note—as is implicit in the article by Winterscheid and Morgan—that a note of restraint has entered concerning the management of these congenital abnormalities. With miniaturization of pump-oxygenators, the use of hypothermia and the demonstration that successful surgical closure of ventricular septal defects is possible in the young infant,[4] it is tempting to advise surgery at an ever earlier age. Perhaps 3 years is the earliest at which an asymptomatic ventricular defect should be closed since the evidence is that nearly all spontaneous closures occur before this time.

In Philadelphia, Dr. Rashkind[5] has devised a provocative medical method of enlarging atrial septal defects without thoracotomy in infants cyanotic because of transposition of the great arteries. With this technique a contrast-filled balloon mounted on the end of a cardiac catheter is pulled from left atrium to right atrium across the foramen ovale, tearing and enlarging the defect in the process. Whether this approach will prove safer than surgical atrial septectomy remains to be seen but at least it avoids the hazards of thoracotomy and proponents claim the eventual correction of transposition by the Mustard[6] procedure will be easier.

All of these observations are of course well-known to the thoracic surgeons and cardiologists alike, but they are mentioned at this time to illustrate that with a subject that has grown as rapidly as the surgery of congenital heart disease constant modification of approach is necessary. ■

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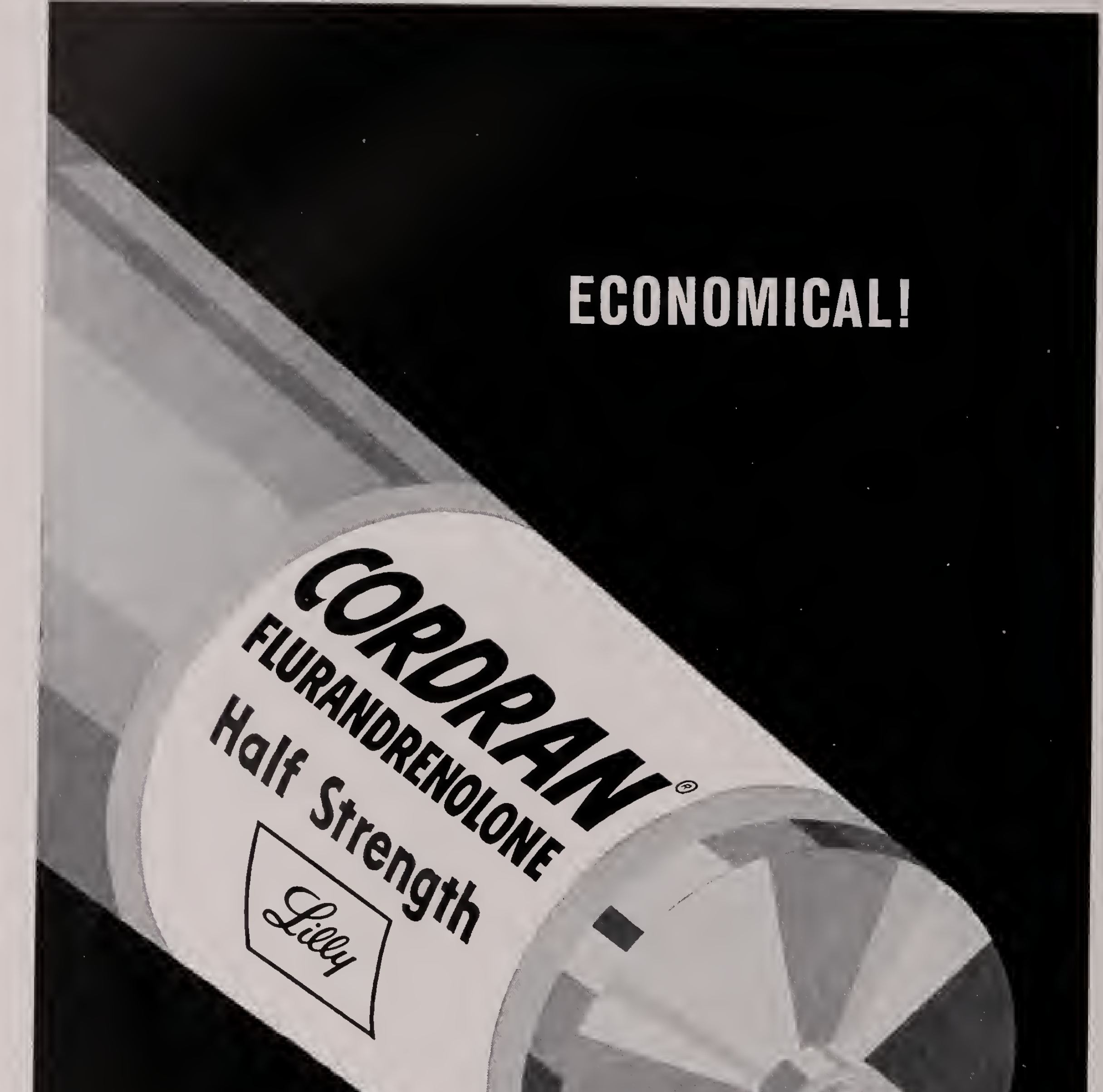

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The Congenitally Malformed

XII Cardiac Lesions Amenable to Surgery

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Lyon, writing in the 1950 edition of Nelson's Textbook of Pediatrics, states "The four types of lesions which are amenable to surgery today are patent ductus arteriosus, tetralogy of Fallot, coarctation of the aorta and vascular rings which surround the trachea and esophagus."[1] These four lesions accounted for approximately one sixth or 160 children in the 1,000 autopsies of children dying with congenital cardiac disease as tabulated by Abbott.[2] Today the numbers are almost reversed; 840 of 1,000 having potentially fatal conditions, have lesions amenable to surgery.

This period of unprecedented surgical advancement had its prologue in 1910 when Ellsberg established a conceptual system of controlled respiration and endotracheal anesthesia[3] and Carrel demonstrated that incisions into the heart and vessels healed well.[4] The opening chapters were written by Gross in 1938 as he first divided a patent ductus arteriosus[5] and by Crafoord in 1944 when he resected a coarctation of the aorta.[6] The theme of cardiopulmonary bypass to facilitate intracardiac surgery was developed by Gibbon. Today, most congenital cardiac lesions can be considered amenable to surgery.

Therefore, it is critical that the physician charged with care of a child with a congenital cardiac defect have an understanding of the different defects, their signs and symptoms, methods of diagnosis, indications for surgery and technique of repair. It is the purpose of this paper to recount the surgical techniques available for repair of congenital cardiac defects and to review the specific lesions that are amenable to surgery.

AVAILABLE SURGICAL TECHNIQUES

open heart surgery utilizing cardiopulmonary bypass

In the 1950's, as intracardiac repair of cardiac defects was being investigated, several techniques to facilitate the repair were developed and used clinically. These techniques utilized hypothermia, cross circulation, the "atrial well," and a pump-oxygenator system. It soon became apparent that the utilization of a pump-oxygenator system providing total cardiopulmonary bypass represented the best and safest method for the repair of most congenital intracardiac defects. This method provided the surgeon with a relatively bloodless intracardiac field and ample time to inspect and repair the defect precisely. As the pump oxygenator systems became more sophisticated, their priming volumes were reduced and hemodilution was introduced. The pump oxygenator systems available today provide safe cardiopulmonary bypass at normothermia for two hours or more. This provides the cardiac surgeon with sufficient time to repair the more complex cardiac lesions.

There are, however, two limitations that restrict the application of cardiopulmonary bypass. One restriction is the severity of the cardiac defect. Patients with tricuspid atresia or truncus arteriosus have lesions which are irrepairable, although palliative surgery may prolong life. The second restriction is related to the age and size of the patient. Ideally, surgery should be delayed until the child reaches an age of 4-5 years. At this age, his intravascular volume, the diameter of his airway and his ability to comply with simple commands are such that cardiopulmonary bypass and postoperative care can be quite satisfactorily carried out. Repair at this age has the additional benefit of allowing the child to enter school as a normal healthy individual who may compete with his peers. Psychologically, as well as physiologically, children of this age tolerate surgery well.

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Between the ages of 2 and 4 years, cardiopulmonary bypass and postoperative care become increasingly difficult. The infant younger than 2 years of age, or smaller than 15 kg of weight, presents special problems relating to cardiopulmonary bypass that make it difficult and hazardous to use. They primarily relate to the relative disparity in size between the pump oxygenator system and the intravascular volume of the infant. These obstacles result in mortality from cardiopulmonary bypass that is extremely high in this size and age group.

palliative surgical procedures

Patients with total anomalous pulmonary venous return, transposition of the great arteries and tetralogy of Fallot, frequently succumb in infancy. However, those individuals with these lesions who survive may be candidates for surgical correction. Some patients with ventricular septal defects also succumb in infancy from pulmonary infection or congestive heart failure. Such patients, even though they survive infancy, may develop pulmonary vascular obstruction which, once etsablished and severe, makes definitive surgical correction impossible. Palliative surgical procedures have been developed that will prevent the early death of the infant or the development of severe pulmonary vascular obstruction and will allow him to reach an age when complete repair can be carried out utilizing cardiopulmonary bypass.

Historically the oldest of these palliative procedures is the Blalock-Taussig subclavian-pulmonic anastomosis and the Potts aortic-pulmonic anastomosis.[7-8] These procedures were used prior to the development of open heart surgery for the treatment of patients with tetralogy of Fallot, and produced augmented pulmonary artery blood flow, increased arterial oxygen saturation and improved growth and development of the child. While such children might then reach adulthood, their life expectancy was limited, and they were often severely restricted because of increasing cyanosis and decreasing exercise tolerance. Open heart surgery allows the surgeon to correct the cardiac defects in patients with tetralogy of Fallot.

Today the infant with tetralogy of Fallot of such severity that his survival is jeopardized and who is of an age or size that makes the utilization of cardiopulmonary bypass impractical can be palliated by the creation of a systemic pulmonary artery shunt by the technique of Blalock-Taussig or Potts, the former being preferable. This will allow the patient to grow and develop to an age and size when definitive repair will be possible. It is important that the surgeon who creates the palliative shunt leave a marking suture loosely about the shunt to facilitate its ligation at the time of the definitive repair.

Transposition of the great arteries is incompatible with life. Infants with this defect often survive for several years if there are associated large defects of the atrial or ventricular septum. These atrial or ventricular septal defects allow mixing of systemic venous and pulmonary venous blood. Such children are cyanotic but could grow and develop. When they reach the age of 4-5 years, total correction of the transposition can be successfully carried out utilizing the intra-atrial venous transposition operation originally described by Merendino. Improved mixing at the atrial level can be accomplished by the Blalock-Hanlon operation. This procedure involves the excision of the ineratrial septum using parallel incisions in the right atrium and left atrium along the intra-atrial groove on the right side of the heart with occlusion of the right portions of the atria. Palliation of infants with transposition of the great vessels by this procedure will then allow them to grow and develop to an age and size when definitive repair can be accomplished.

pulmonary artery constriction

Infants with large ventricular septal defects alone or in association with other defects, e.g. transposition of the great vessels or patent ductus arteriosus, have large pulmonary arterial blood flows. They often experience repeated pulmonary infections and congestive heart failure. Increased pulmonary vascular obstruction may develop, and when firmly established make definitive repair of the cardiac defect contraindicated. Unfortunately, the development of pulmonary vascular obstruction is often associated with clinical improvement in the child so that he has fewer pulmonary infections, and congestive heart failure is no longer a problem. The unknowing physician might take comfort in these changes when in reality they abort any opportunity for surgical correction and portend a relatively early death.

If the pulmonary vascular bed is protected from large pulmonary blood flows, as in patients who have pulmonary valvular stenosis with their ventricular septal defect, pulmonary vascular obstruction does not develop. For this reason, pulmonary artery banding has been recommended in certain patients with large pulmonary blood flows. This procedure involves placing an umbilical tape band about the pulmonary artery and constricting it to the point where the distal pulmonary arterial pressure is approximately one-half that of the systemic pressure. Care must be exercised in the application of this band that it is not so obstructive as to produce intolerable acute right heart strain, dilatation and failure. The limits of constriction of the pulmonary artery that produces significant reduction in pulmonary flow (the object of the procedure) and avoids intolerable right heart strain are very narrow. This increases the mortality of the operation and enhances the opportunity for failure to protect the pulmonary vascular bed adequately. However, properly carried out, this procedure provides significant palliation for the patient with high pulmonary artery blood flows and may prevent development of irreversible pulmonary vascular disease.

Patients with total right-to-left shunt at the atrial level, tricuspid atresia, usually succumb in the first year of life. No corrective, operative procedure is currently available. The Glen procedure, i.e.—superior vena cava—pulmonary artery anastomosis, may be useful in palliation of such patients. This procedure increases pulmonary artery flow and hense results in decreased cyanosis with associated improved growth and development.

hypothermia

Bigelow, of Toronto, more than anyone else, developed the techniques of hypothermia for use in repair of cardiac defects, and defined the limits of its application.[9] Other surgeons, notably Swan, accumulated extensive experience in its application to clinical cases.[10] The limited time for intracardiac repair during circulatory arrest under hypothermia prevented its wide utilization. The simultaneous development of pump oxygenator systems, with their extended periods of cariopulmonary bypass, resulted in decreasing interest in the use of hypothermia as an adjunct to cardiac surgery.

Certain laboratories, notably in Japan, continued to study the use of profound hypothermia to facilitate the surgical correction of certain cardiac lesions. This technique has particular application in infants less than 2 years of age, since cardiopulmonary bypass is extremely hazardous in such patients. It is apparent from the reports of Horiuchi *et al* that hypothermia to temperatures of 20 C, associated with deep ether anesthesia, careful control of the pH and resuscitation utilizing gentle cardiac massage, can provide the surgeon with 30 minutes of total circulatory arrest and intracardiac operating time.[11]

Mohri and Dillard have investigated hypothermia in our own laboratories.[12] Using the techniques devised here, infants may be cooled to 17 C, endure circulatory arrest for 45 minutes and be resuscitated without any residual deficiency. This period of circulatory arrest provides ample time for the correction of certain cardiac defects—notably total anomalous pulmonary venous return, ventricular septal defect or transposition of the great vessels.

Profound hypothermia provides opportunity for complete correction of certain defects in the very young infant. It should, however, be reserved for those infants who would not otherwise be expected to survive until their second birthday. The obvious advantage of this technique over the palliative procedures is that the infant is totally corrected at an early age and is not exposed to the risk of two surgical procedures. Further work is in progress with this technique to define further its usefulness and its limitations.

THE GREAT VESSELS

patent ductus arteriosus

This defect, the persistence of a normal fetal communication between left pulmonary artery and the aorta frequently occurs as an isolated lesion. It may be associated with other cardiac defects such as coarctation of the aorta, ventricular septal defect, aortic stenosis or transposition of the great vessels.

The persistence of this communication produces an augmentation of pulmonary blood flow that may be three times that of the systemic flow. The infant may be entirely asymptomatic, presenting with bounding pulse, widened pulse pressure, and a crescendo-decrescendo "machinery" murmur, maximal at the left base. The infant with a large shunt may early develop congestive heart failure. If this large shunt persists the patient may develop pulmonary vascular obstruction, become cyanotic and death may result. Bacterial endocarditis may be a complication of the lesion.

Surgical indications: The anatomic existence of a patent ductus arteriosus is the indication for its division and closure. The division of the ductus can be done at any age. It must be done before irreversible pulmonary vascular changes ensure. The size of the child at 4 years of age and the ease of postoperative care make this an ideal time to recommend surgery. Should the child exhibit congestive heart failure or recurrent pulmonary infections before the age of four years the operation can be accomplished at that time. Predominant right to left shunting is a contraindication to surgery.

coarctation of the aorta

This lesion is a narrowing of the aorta just beyond the left subclavian artery. The coarctation is usually postductal in location, being immediately beyond or adjacent to the ligamentum or ductus arteriosus. Less frequently the coarctation occurs before the site of the ductus or ligamentum arteriosus and the preductal coarctation may extend over a long segment of the aorta as a hypoplastic vessel. The ductus is often patent in such cases; if severe pulmonary vascular obstruction exists, a right to left shunt will be present, the right ventricle perfusing the lower part of the body. In such a patient, cyanosis will be present only in the lower trunk and extremities.

Depending on the degree of narrowing, symptomatology varies from asymptomatic adults to critically ill infants with congestive heart failure. The usual patient develops hypertension at an early age and on examination is found to have low pressure in the legs, delayed femoral pulses and a systolic murmur over the left upper portion of the back. Allowed to go unresected, patients with significant coarctation may expect to succumb to complications such as endocarditis, intracranial bleeding, rupture of the aorta, dissecting aneurysm or hypertensive cardiovascular disease.

Surgical indications: The presence of upper extremity hypertension in a patient with coarctation of the aorta is the indication for surgical resection. This resection should, optimally, be delayed until the child is 5 years old but no later than 15 years. Resection of the coarctation is accomplished by cross clamping of the aorta. In the presence of adequately developed collateral circulation this maneuver does not produce spinal cord paralysis. Such collateral circulation is usually of significant magnitude by the age of 5.

In the infant with cardiac decompensation who requires resection of the coarctation at an earlier age, the distal aortic pressure should be monitored during preliminary cross clamping of the aorta. This enables the surgeon to ascertain that mean pressure in the distal aorta is sufficient to prevent spinal cord ischemia. If the distal aortic mean pressure is low, and spinal cord ischemia is consequently a possibility, the surgeon will have to resort to other accepted methods to maintain adequate distal pressure.

SEPTAL DEFECTS

Septal defects are of infinite variety. They include the sinous venosus defects, atrial septal defects of the secundum variety, atrial septal defects of the primum variety, endocardial cushion defects and ventricular septal defects. The presence in an infant of a septal defect of one of these categories results in each instance in a left to right shunt, producing increased pulmonary blood flow. If this increased pulmonary blood flow is of significant volume, the child experiences dysnea, fatigueability and congestive heart failure. Onset and severity of these symptoms are related to the size of the defect and the volume of pulmonary blood flow.

In the instance of endocardial cushion defects, there may be an associated mitral regurgitation or tricuspid regurgitation, should these valves be cleft or the atrio-ventricular canal be completely open. Such defects also produce bidirectional shunting.

In those infants with ventricular septal defects, there is the additional possibility for the development of pulmonary vascular obstruction. The development of this obstruction contraindicates closure of ventricular septal defects, since the patient would thereafter develop right heart failure and succumb.

Patients with atrial septal defect frequently do not complain of any symptoms. Well motivated children and adults may indeed be able to engage in physical activities as well as their peers despite the presence of moderately large left to right shunts. It is not infrequent, at autopsy, to find an elderly adult who has had a moderately large atrial septal defect throughout his life. On review of his medical record there appear to have been few if any signs and symptoms of disability produced by the lesion. Patients with atrial septal defects, either of the secondum, primum, or sinus venosus variety who have a pulmonic to systemic artery flow ratio of 2 to 1 or more should undergo surgical closure of the defect. At these flow ratios the individual may be expected to develop increasing congestive heart failure with advancing age and thus progressing disability.

Patients with endocardial cushion defects usually present with a low atrial septal defect (septum primum defect) with a cleft mitral valve. The second most common expression of this defect is in a complete atrio-ventricular canal where there is also a ventricular septal defect, and a cleft tricuspid valve resulting in a common A-V valve. The total spectrum of this defect has many variations. In patients with the partial forms, the symptoms of congestive failure, with or without mitral regurgitation, usually present in infancy, necessitating early surgical intervention and repair. Patients with the complete atrial ventricular canal defect exhibit symptoms in early infancy and these may progress to death in the first few years of life.

Patients with ventricular septal defects may be entirely asymptomatic and indeed there are significant numbers of recorded instances of spontaneous closure of this defect. In infancy repeated pulmonary infections and congestive heart failure may result in the early death of the infant. Frequently the child with this defect may early present with repeated pulmonary infections and congestive failure that after a period of time appears to improve. This improvement may portend irreversible changes in the pulmonary vascular bed which progress to produce significant right to left shunting and thence to establishment of a contraindication to surgery.

atrial septal defects

Atrial septal defects of the sinous venosus, secundum or primum varieties that have a left to right shunt and produce pulmonary artery to systemic blood flow ratios of two to one or more should be closed when the child reaches the age of 4 to 5, or at any time thereafter. This procedure is easily carried out through a right anterior thoracotomy incision. The defect frequently can be easily closed without recourse to intracardiac cloth patches. If closure of the defect cannot be easily accomplished without tension on the adjacent atrial wall or conduction area, an intracardiac teflon or dacron patch may be used to close the defect. Care must be taken in the closure of the primum variety of the atrial septal defects since the inferior point of closure may well be in juxtaposition to the bundle of His and the conduction system. With care in the placement of the suture and careful electrocardiographic monitoring during their insertion and tying, the creation of A-V blocks can usually be avoided.

ventricular septal defects

The infant with a loud murmur suggestive of ventricular septal defect, but without congestive heart failure or electrocardiographic findings of ventricular hypertrophy, may well be followed until the age of 4 or 5 years. Cardiac catheterization studies can be done at any time during this period. In many recorded instances, the small ventricular defect has closed spontaneously. A left to right shunt of such volume as to produce pulmonary artery to systemic flow ratios of two to one is an indication for planning of surgical closure of the ventricular septal defect. This surgical intervention should be planned for the child at the age of 4 to 5 years or older. The child with very large pulmonary artery flow secondary to a large ventricular septal defect must be carefully followed in order to intervene surgically if signs and symptoms of pulmonary vascular obstructive changes occur. If one finds right ventricular pressure at the time of cardiac catheterization that is approaching that of the systemic pressure, surgical intervention as soon as possible should be considered. These pressure changes suggest the beginning of pulmonary vascular obstruction that, if allowed to continue, may result in irreversible vascular changes and make surgery contraindicated. Frequently, infants with large ventricular septal defects and big left to right shunts may early present with recurrent pulmonary infections and congestive heart failure. Because of their size or age being less than 2 years it may be necessary to consider the application of a pulmonary band in order to decrease symptoms and to protect the pulmonary vascular bed until the infant reaches an age or size that will be more compatible with cardiopulmonary bypass, approximately 2 years. This is the group of infants that we believe are candidates for primary closure of the ventricular septal defect using hypothermia. This method of repair in the young infant exposes him to only one operative procedure and that provides permanent and complete repair of the cardiac defect. The mortality for this approach to the large ventricular septal defect producing severe illness in the infant has been very low in the series from the Japanese experience.

endocardial cushion defects

Infants with endocardial cushion defects not only have the left to right shunt of the atrial or ventricular septal defect, but may also present with mitral or tricuspid regurgitation. Such infants commonly present with repeated pulmonary infections, severe congestive heart failure and the beginning development of pulmonary vascular obstructive disease. If the child can be carried on medical therapy until the age of 4 or 5 years without the development of changes in his pulmonary vasculature, this is the treatment of choice. Should surgical intervention be necessary, pulmonary banding to decrease the pulmonary blood flow can be useful as a palliative procedure. The infant with this type of defect may be a candidate for primary repair utilizing hypothermia. This would, of course, provide for complete and total repair of the defect and avoid the necessity of a second operation at a later age. While in these infants a cleft mitral valve is the usual finding, mitral regurgitation may not be present. It is important at the time of cardiac catheterization by pressure studies, or at the time of definitive surgery prior to the institution of cardiopulmonary bypass, that an effort be made to ascertain whether mitral regurgitation is present. If mitral regurgitation is not present, and surgical closure of the defect does not distort the A-V valve ring, closure of the mitral valve cleft may not be necessary. If this cleft must be closed, it is important to carry out the procedure with minimal loss of valve substance in the sutures. Incorporation of too much of the mitral valve in cleft-approximating sutures may result in insufficiency itself. These same comments apply to the tricuspid valve. Repair of the endocardial cushion defects may well result in conduction defects or complete heart block. The surgeon carrying out repair of such endocardial cushion defects must be prepared to deal with this complication.

TRANSPOSITIONS

transposition of the pulmonary veins

Transposition of the pulmonary veins is an abnormality in which one or all of the pulmonary veins enter the right atrium or one of its tributaries. The point of entry to the right atrium or its tributaries is commonly of a supracardiac variety—into the superior vena cava near its right atrial junction. Occasionally this supracardiac variety have the veins communicating with a persistent left superior vena cava or innominate vein. The second most common point of entry is at the cardiac level, that is via the coronary sinus or directly into the right atrium. Less common is the infracardiac variety in which the anomalous pulmonary veins enter via the portal vein or a ductus venosus. Patients with total annomalous pulmonary venous return must, of course, have a patent foramen ovale or an atrial septal defect in order to survive after birth. The venous defect may be partial in that only a single small right pulmonary vein or several pulmonary veins may be involved in the anomalous drainage. In such instances the individual may reach adult life with relatively few if any symptoms. As increasing numbers of the pulmonary veins enter the right atrium or its appendages, the likelihood of more significant symptoms obtains, and these symptoms may be so severe as to produce death in infancy or early childhood. This type of early onset and progression to death is frequently found when transposition of the pulmonary veins to the right side is complete.

Infants with this defect frequently present early with dyspnea, fatigue, and frequent pulmonary infections. They may evidence mild to moderate cyanosis.

Indications for surgery: All patients with complete transposition of the pulmonary veins, or of a number of pulmonary veins that may produce significant left to right shunting, should be advised to have surgery. This surgical correction should be undertaken after the age of 4 years. It is particularly important in the repair of this anomaly that careful cardiac catheterization and angiocardiographic studies be done prior to surgery in order to provide the surgeon with all the information available regarding the courses and point of entrance of the anomalous veins into the right atrium or its appendages. This is particularly true in those patients who may have a persistent left superior vena cava and absence of an adequate innominate vein where a special arrangement for the caval catheters to the pump oxygenator system must be employed. In the patient in whom congestive heart failure and cyanosis supervene in infancy, repair of the defect should be undertaken utilizing profound hypothermia. This repair is most rewarding since the surgery results in total correction of the defect in these infants, whose life expectancy without surgery is extremely poor, and for whom there are no satisfactory palliative procedures.

transposition of the great arteries

In this condition the aorta and pulmonary arteries arise from the right (anterior) and left (posterior) ventricles respectively. During gestation the presence of a patent foramen ovale and ductus arteriosis provide adequate mixing of the pulmonary and systemic circuits so that intrauterine growth and development are normal. At birth, should closure of the ductus and foramen ovale occur in the usual fashion, separation of the two circulations is total and death is inevitable. Thus, survival at the time of birth occurs only if there is some mixing between these circulations. Commonly this defect is associated with atrial septal defect, ventricular septal defect and patent duetus arteriosus. If these defects are large, there may be adequate mixing of the pulmonary and systemic blood flows and the patient may survive for a period of time. Usually, however, this mixing is inadequate and cyanosis and dyspnea develop early in the neonatal period with congestive heart failure and death. Should the child reach an age when cardiopulmonary bypass can be utilized for the repair, the creation of an interatrial baffle that produces a venous transposition rectifies the separate pulmonary and systemic vascular circuits. In those infants with ventricular septal defects, this total correction can be involved—and challenging.

Indications for surgery: The severity of the lesion and the inevitable demise of the patient without correction, necessitates surgery in all infants and children with this defect. In early infancy the operative procedures are directed at improved mixing, reduction of excessive pulmonary blood flow or creation of a shunt if pulmonary stenosis is present. The improved mixing may be accomplished by excision of the interatrial septum using the Blalock-Hanlon operation. Division of the patent ductus arteriosis may reduce pulmonary blood flow sufficiently. A systemic-pulmonary artery shunt can be accomplished to improve pulmonary flow if pulmonary stenosis is present. Less frequently a superior vena cava-pulmonary artery anastomosis is utilized for this shunt.

As more experience is gained in the use of profound hypothermia and the length of circulatory arrest that can be tolerated by the infant is extended, this may well prove to be the method of choice in the treatment of patients with transposition of the great arteries. The limiting feature in the application of this method of repair is, of course, the complexity of the cardiac defects. The addition of the surgical necessity for the closure of a patent ductus arteriosus, a large ventricular septal defect as well as creation of the interatrial venous transposition, may require so long a period of circulatory arrest as to prevent utilization of profound hypothermic techniques. Only time and experience will demonstrate the advantages of primary and total correction of this lesion with profound hypothermia as compared with the palliative surgical procedures. Like the patients with complete transposition of the pulmonary veins, a careful documentation by preoperative cardiac catheterization is essential in planning the surgical approach—an approach that will either palliate the patient until he reaches an age that will allow use of cardiopulmonary bypass or the undertaking of primary repair utilizing profound hypothermia.

tetralogy of Fallot

This cardiac defect that represents a large ventricular septal defect associated with pulmonary stenosis accounts for a great deal of congenital heart disease. The ventricular septal defect is high in the membranous septum and variable in size. The pulmonary stenosis may be valvular, infundibular or combined. Occasionally pulmonary atresia is present. The overriding or dextroposition of the aorta is extremely variable. The infants with this congenital defect may show little or no cyanosis, if the degree of obstruction to the pulmonary outflow is minimal. With increasing degrees of pulmonary obstruction, the patients become increasingly cyanotic as the right to left shunt is of larger volume. The patients with tetralogy of Fallot typically evidence some cyanosis; shortly after birth they become dyspneic; commonly exhibit squatting and decreased exercise tolerance. The patients with little or no pulmonary stenosis and therefore little right to left shunting, may exhibit few symptoms. The infant that is less than 2 years of age and exhibits severe cyanosis, dyspnea and decreased exercise tolerance, can undergo a palliative systemic to pulmonary artery shunt that will allow growth and survival to such age as to allow total correction. The Blalock-Taussig subclavian to aortic anastomosis or the Potts aorticopulmonic anastomosis are the palliative procedures most commonly utilized. These procedures result in decreased cyanosis and improved growth of the infant. Upon reaching 4 to 5 years of age, and anytime thereafter, primary repair of the defect should be undertaken. Primary repair in those individuals with a ventricular septal defect and pulmonary valvular stenosis involves simple patch closure of the ventricular septal defect, and incision of the fused commissures of the pulmonary valve. If the pulmonary stenosis is of the infundibular variety, the muscular bands creating this obstruction should be resected. In those infants with severe infundibular stenosis or abnormalities of the pulmonary valve where reconstruction of this area is not possible, relief of the obstruction is critical and one should be willing to accept some pulmonary insufficiency. If the patient has had a palliative systemic to pulmonary artery shunt, it is, of course, necessary at the time of definitive repair to close this left to right shunt.

valvular stenosis

Either the pulmonary or the aortic valves may reveal stenosis as an expression of a congenital cardiac abnormality. In each instance this stenosis may be valvular and this type is the most common in either the pulmonic or aortic areas. The valvular obstruction may involve a bicuspidization of the valve or be in association with a tricuspid valve. In both instances the stenosis may be of a subvalvular variety. In the case of the pulmonic valve this is usually a muscular hypertrophy producing right ventricular outflow obstruction. In the subvalvular aortic stenosis, there may not only be a muscular hypertrophy and obstruction but there may also be a diaphragmatic fibrous structure immediately below the valve. In the aortic lesion there may also be a supravalvular stenosis that occurs as the result of an angular constriction above the aortic valve. This is usually at the site of the commissural insertion of the aortic cusps. Such a supravalvular stenosis may occur in the pulmonic area but is rare. Pulmonic stenosis produces a variety of conditions. Its expression may be in an infant with cyanosis, congestive heart failure and an early death or in the asymptomatic adult with a relatively normal lifespan. The same spectrum is characteristic of patients with aortic stenosis plus the threat of sudden death as a result of inadequate cardiac output and myocardial ischemia with arrhythmias.

Indications for surgery. The patient who shows a significant impairment of the ventricular outflow as expressed by a peak systolic gradient of 60 mm Hg or more across the ventricular to arterial lumens and has a valve area that is less than 0.7 sq. cm. per square meter of body surface area, should undergo operative repair of the defect. In the instances of sub or supravalvular stenosis, surgical correction can usually be accomplished. In those patients with tricuspid valves and valvular stenosis, incision of the commissures exactly back to the aorta or pulmonary artery wall usually provides relief of the obstruction. In patients with bicuspidization of the valve, this incision back to the vessel wall may not provide enough increase in luminal area to reduce the gradient significantly. This is true in the instances when a bicuspid valve is present because of the pressure in the full vessel during systole produces tension on the edge of the cusps and draws them as tight as bow strings across the outflow tract. Thus, it may be necessary to replace the valve with one of the prosthetic valves available if the gradient cannot be significantly reduced. This necessity of valve replacement with present prosthetic valves, with their incidence of thromboembolic phenomenon and anticoagulant requirements, obligates the surgeon to careful evaluation of the symptoms, gradient, and anatomy of the valve cusps in patients with aortic valvular stenosis before recommending surgical intervention.

tricuspid atresia

This congenital anomaly is present when the tricuspid valve is absent or imperforate. This results in total right to left shunt at the atrial level and is frequently associated with a hypoplastic or (atretic) right ventricular cavity. Patients with this severe defect present with cyanosis, dyspnea and retarded development in the neonatal period. Death usually supervenes before the first year of life is completed. The usual hypoplasia of the right heart, a fundamental part of this lesion, prevents total surgical correction. Palliative shunts of the superior vena cava to pulmonary artery (Glenn procedure) or systemic artery to pulmonary artery variety (Blalock-Taussig or Potts procedures) are all that are currently available for these unfortunate infants. Such palliative procedures should be carried out since infants carried along for a period of time in this way might survive to a time in our surgical development when corrective procedures will become available.

summary

Congenital cardiac defects challenge the physician to know and understand their pathophysiology. Such knowledge and comprehension is essential if one is to program an intelligent approach to the diagnosis, choice of time for surgery and selection of palliative procedures. Thousands of children that twenty years ago would have been experiencing severe congestive heart failure, dyspnea, cyanosis and death can today be successfully corrected and may look forward to a normal life expectancy. ■

BB438 University Hospital (98105)
(Dr. Winterscheid)

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Lyophilized Bone in Surgery of the External Nasal Pyramid and Septum

GEORGE H. DRUMHELLER, M.D., Everett, Washington

Lyophilized, heterogenous bone and cartilage provided additional, controlled, fibrous tissue for 200 patients. There was no adverse reaction. One wound was contaminated after surgery, but no further procedure was required after healing.

Good nasal architecture depends on a firm framework of bone and cartilage. Surgical management of patients who have too little tissue due to previous nasal surgery, trauma with loss of tissue, infections, hematomata, or lack of growth has challenged the ingenuity of surgeons since antiquity. The search for acceptable replacement materials has run the gamut of ivory, plastic, metal, autogenous, isogenous, and heterogenous implants. The last three have included skin, bone, cartilage, fat, fascia, and mucous membranes.

It is most desirable to avoid the use of the first three since they do not become part of the host, no matter how well they are tolerated. Isogenous and heterogenous implants, in the past, have been undesirable due to difficulty of preparation and maintenance of sterility. They are also subject to rejection as result of inflammatory reaction.

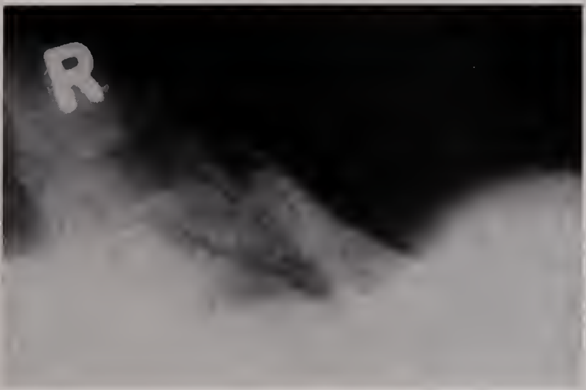
In my experience, autogenous bone and cartilage are the best reconstructive materials, when available, for use in the nasal septum or external pyramid. Best sources outside the nose are the iliac crest and ribs. Their use in acute trauma, with its potential of infection or foreign body reaction, is not wise. While extremely useful in the management of septal abscess and its complications they are invariably absorbed or extruded. The repeated trauma required to obtain these materials, and their limited supply, precludes their use, until after the age of fourteen years, in numerous procedures. These are the operations designed to stimulate skin growth over the bony nasal pyramid in children who have an absence or underdevelopment of the nasal bones with associated lack of projection.

a new material

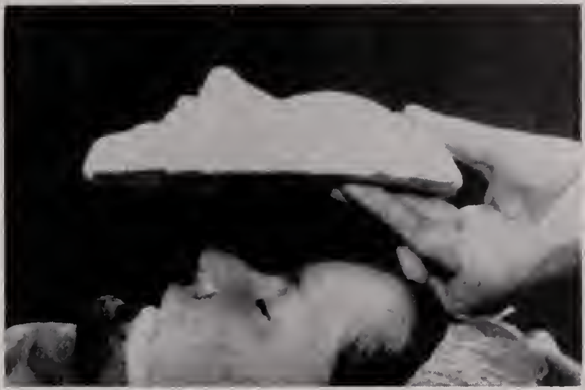
The development of lyophilized cartilage and bone has been a valuable addition to our list of materials. This heterogenous material is prepared for use and is put up in a sterile package. It is available 24 hours a day, on a moment's notice, and in any quantity requested.

Since 1959, I have used this material in more than 200 patients. Tissue acceptance has been good. There has been no evidence of rejection or inflammation and the only unfavorable result was in one case following infection with a human contaminant. It was presumably introduced by the patient as it developed at college on the 14th day and a coliform bacillus was cultured from the exudate. The infection was controlled by incision and drainage, and antibiotic therapy. The postoperative result was not seriously affected by this episode and further nasal surgery was not indicated in this patient.

At this time I prefer cancellous slabs (Boplant R) which are crushed and inserted in small pieces. It usually supplies bulk for at least two months and is slowly replaced by fibrous tissue with a resultant net gain which is appreciably less than the amounts used. It may supply some nourishment to the tissues during this process but more importantly it interrupts the normal scar retraction and subsequent deformity which one would encounter without it. It has been especially useful and well tolerated when used repeatedly in growing children to stretch the skin and permit its increased growth while waiting for maturity, at which time autogenous cancellous bone from the iliac crest may be implanted in the larger dorsal pocket.



X-ray lateral view of nose one year post operative and post infection with coliform bacillus. Surviving are autogenous bone and cartilage pieces. Boplant replacement by fibrous tissue with resultant smooth dorsum is noted at rhinion.



Immediate post operative photograph to illustrate excessive correction of dorsum to allow for absorption of Boplant and replacement by fibrous tissue. Lateral view with pre-operative mask for comparison.

In severe fractures of the maxilla and infraorbital rim, after repositioning the small autogenous bone fragments through a canine incision and internal splinting in the antrum with idoform gauze, I have placed a layer of crushed cancellous Boplant pieces over the fracture sites with resultant smooth, firm, primary healing in all cases.

In summary, when there is no tissue to spare, heterogenous lyophilized bone or cartilage are excellent substitutes which become living parts of the patient as controlled fibrous tissue. ■

1515 Pacific Ave. (98201)

abstracto

Hueso y cartílago heterogeneos liofilizados proporcionó tejido fibroso controlado adicional para 200 pacientes. No hubo reacción adversa. Una herida se contaminó despues de la cirujía pero no requirió ningún procedimiento después de sanar.

A person who thinks that those who disagree with him upon a certain matter are wrong, is a person of strong convictions. In his conclusions, he may be right or he may be wrong. If I can show that his conclusions are based upon false premises or result from faulty reasoning, I may undertake to do so. But I shall not condemn or censure him for holding to his honest convictions. And I shall not criticize him for thinking that everybody who disagrees with him is wrong.

Edward A. Lewis, in The Freeman, November, 1966

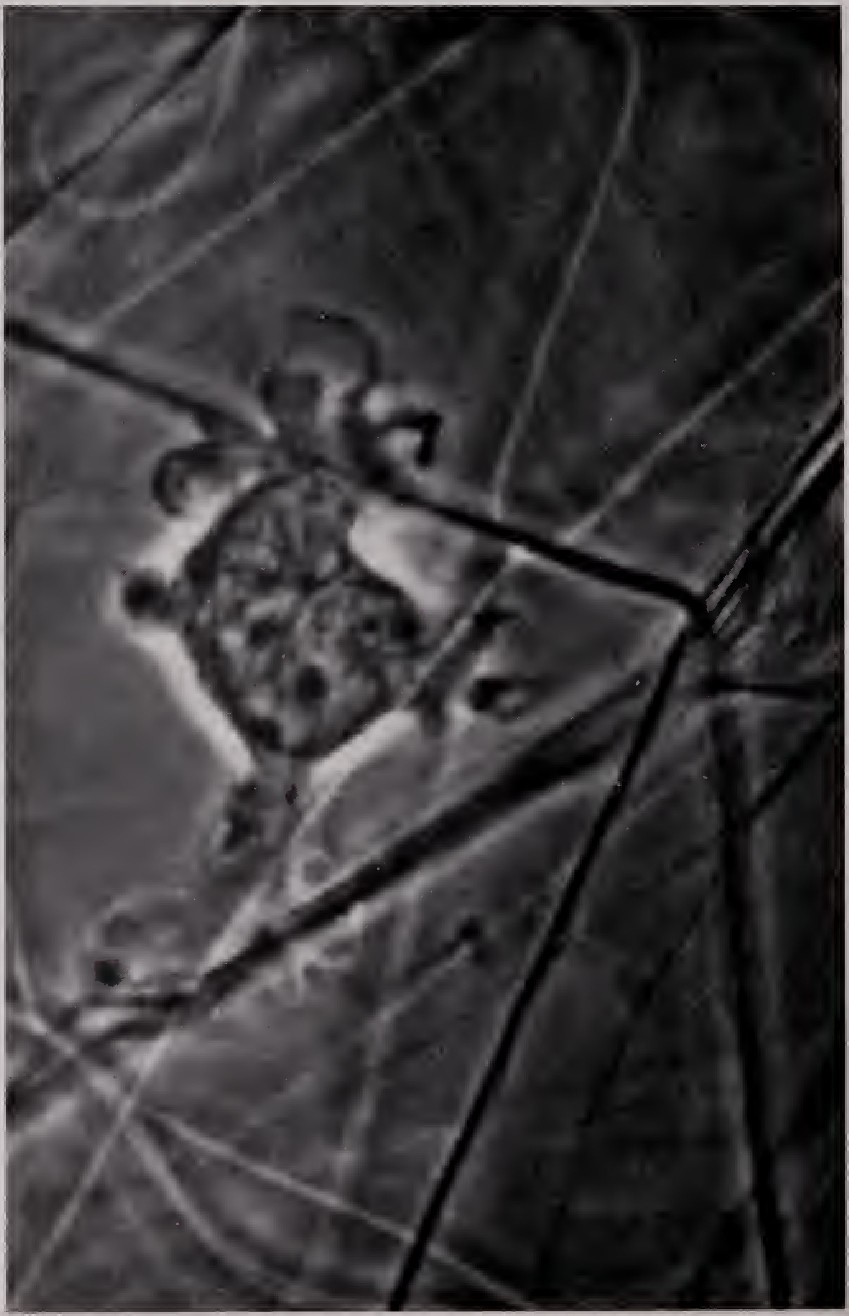
INFLAMMATION:

A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

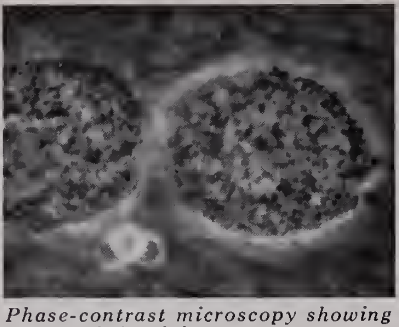


Visual evidence of how corticosteroids influence the inflammatory reaction

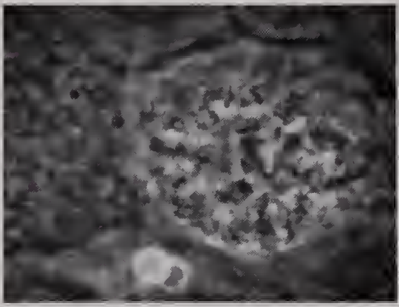
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



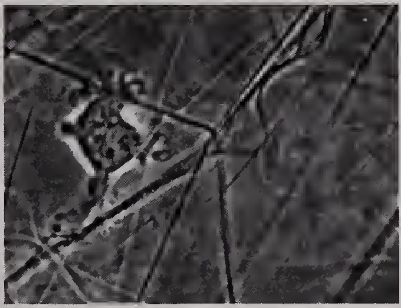
Phase-contrast microscopy showing mast cell before injury.



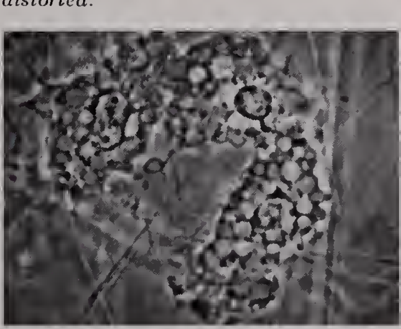
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

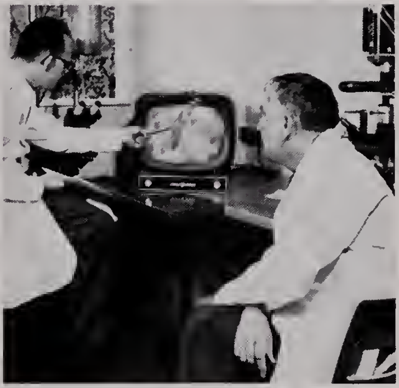
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



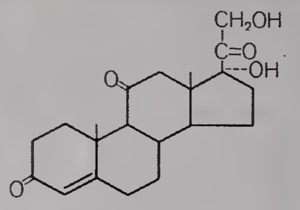
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

A New View of Corticosteroid Action in Inflammatory Dermatoses, a film based on this study, is now available from your Syntex representative.

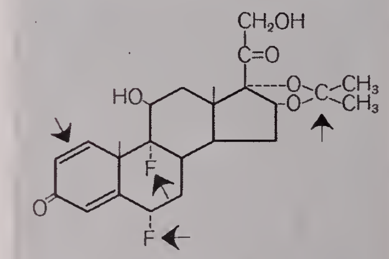
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

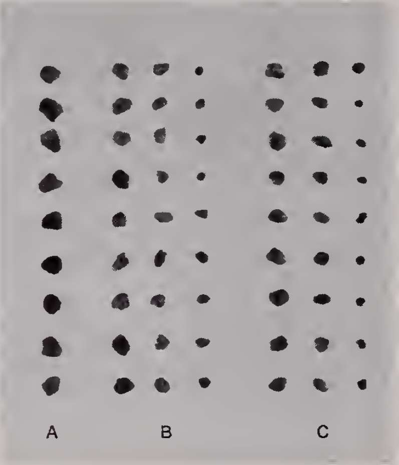


Fluocinolone Acetonide (Synalar)

- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at both the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.

THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION
For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes. CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

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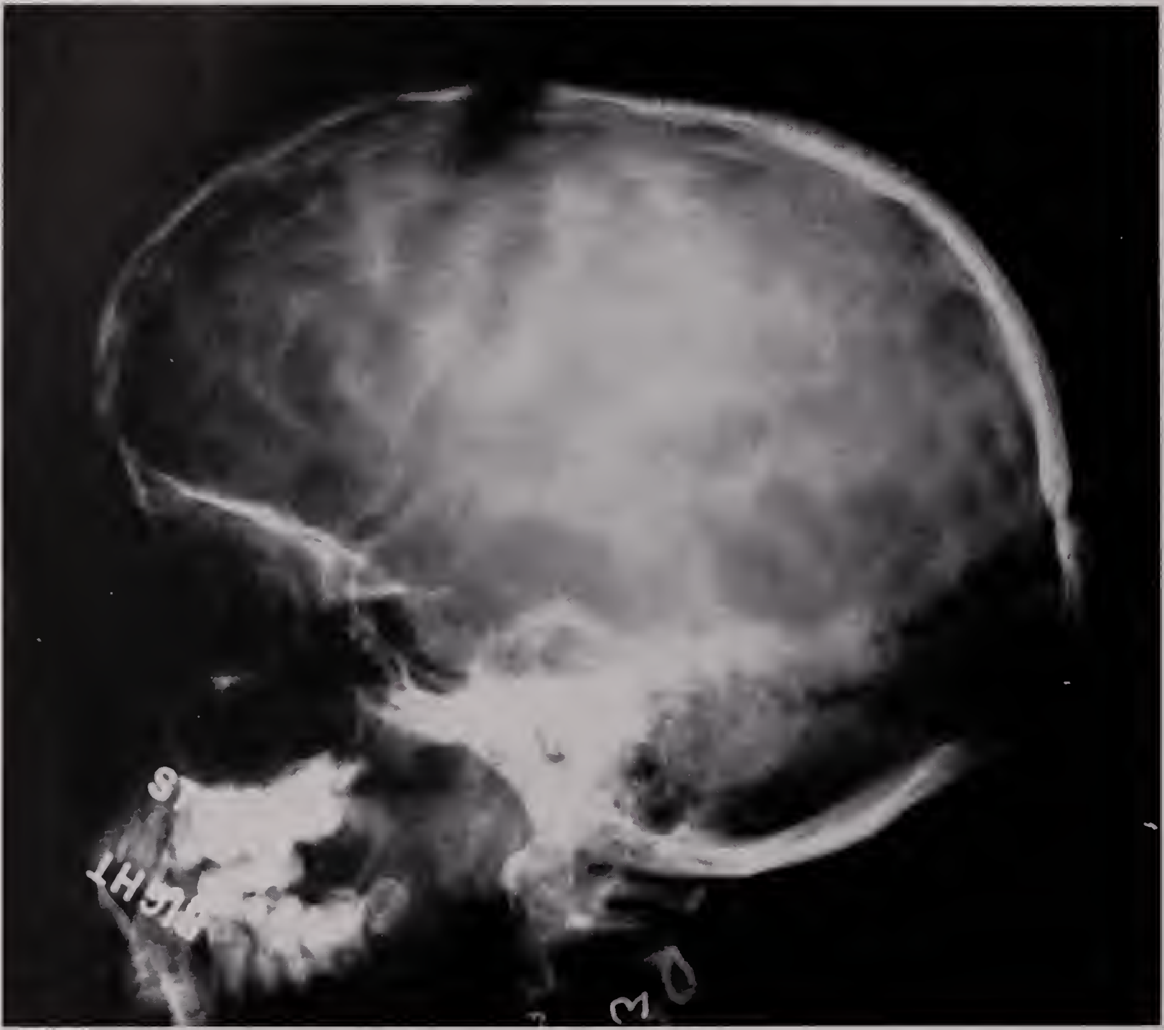
Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards

X-Ray of the Month



This 10-year-old male was admitted to the hospital with a somewhat vague history and finding, typical of young children. Physical examination revealed evidence of increased intracranial pressure and unilateral optic atrophy. The above is one of a series of routine skull films. How far can the differential diagnosis be documented on the basis of the above film?

See page 299

Note: This page was changed on press. Reference on page 299 is in error.

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BRAND OF PHENOBARBITAL AND BELLADONNA EXTRACT

Belap decreases hyperacidity. Belap reduces nervous tension. Belap soothes the spastic gut. What more could you ask of one little tablet?

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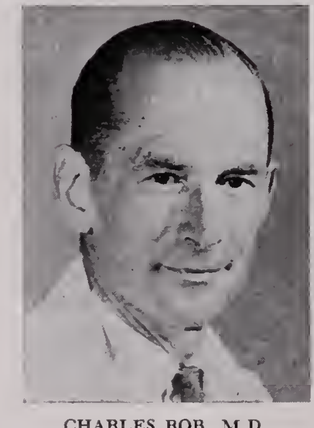
Three Sommer Lecturers At UOMS Alumni Meeting

MAXWELL FINLAND, M.D.



CHARLES ROB, M.D.

ROBERT A. CHASE, M.D.

Three Sommer Memorial Lecturers head the list of featured speakers for the 52nd annual meeting of the alumni of the University of Oregon Medical School April 5 through 7 in Portland. They are Charles Rob, on the faculty at the University of Rochester School of Medicine and Dentistry; Robert A. Chase, on the medical school faculty at Stanford University; and Maxwell Finland, professor at Harvard Medical School.

April 5

9:30 a.m. *The Surgery of Occlusive Disease of the Extracranial Cerebral Arteries*
Dr. Rob

11:00 a.m. *Therapeutic Strategy in Acute Hand Injuries*
Dr. Chase

1:30 p.m. *Evaluation of Prophylactic Anticoagulant Therapy after Myocardial Infarction*
Arthur Seaman, M.D.

2:00 p.m. *Iatrogenic Liver Injury*
John Benson, M.D.

2:30 p.m. *Arterial Blood Gases in Disease*
Miles Edwards, M.D.

3:30 p.m. *Antimicrobial Agents and Their Proper Use*
Dr. Finland

4:30 p.m. *Allergenic and Anti-Staphlococcal Features of New Penicillins and Cephalosporins*
E. Jack Benner, M.D.

April 6

9:00 a.m. *Acute Injuries of the Face*
Dr. Chase

10:00 a.m. *Management of Injury to the 7th Nerve —Including Bell's Palsy*
David D. DeWeese, M.D.

11:00 a.m. *Pneumonias and Acute Respiratory Infections*
Dr. Finland

1:30 p.m. *Evaluation of Routine Admission Chemistry Screening in a Private Hospital*
David J. Brown, M.D.

2:00 p.m. *Angiographic Evaluation of Coronary Artery Disease*
Melvin Judkins, M.D.

2:30 p.m. *Myocardial Revascularization*
Rodney Herr, M.D.

3:30 p.m. *The Management of Gangrene and Rest Pain of the Extremities*
Dr. Rob

4:30 p.m. *Side Effects of Various Drugs Upon the Eyes*
Robert P. Burns, M.D.

April 7

9:00 a.m. *Serious Infections Acquired in Hospitals*
Dr. Finland

10:00 a.m. *The Rehabilitation Surgeon*
Dr. Chase

11:00 a.m. *Diseases of the Coeliac and Mesenteric Arteries*
Dr. Rob

1:00 p.m. Luncheon: Hilton Hotel
Speaker: Howard P. Lewis, M.D.

Dr. Allen Heads New Department

CLIFFORD V. ALLEN, M.D.

Clifford V. Allen, M.D., has been appointed chairman of a new department at the University of Oregon Medical School. Formerly head of the division of radiotherapy at the school, he will now head up the newly-formed Radiation Therapy Department.

Dr. Allen, who joined the UOMS faculty in 1960, is a diplomate of the American Board of Radiology, a member of the American College of Radiology, the Society of Nuclear Medicine, and the American Society of Therapeutic Radiologists.

He has conducted extensive research on the combined effect of radiation therapy and surgery in cancer and is the author of numerous papers on the treatment of malignancies.

Twelve Licensed by Oregon Board

The following physicians and surgeons have been licensed by the Board of Medical Examiners of the State of Oregon to practice in Oregon: Eric Philip Charles Benson, Gordon Anton Caron, Peter John Dawson, John Joseph Maria Egan, Meredith Kay Hester Fieldhouse, Raymond Frederick Graap, Jr., and Mary Helen Wilder, all of Portland; Stanley Austin, Seattle; James Brooks Borden, Oakland, Calif.; Richard Charles Gilsdorf, United States Air Force; Joseph Frederick Powers, United States Army; and Philip Ira Wagner, United States Navy.

O T C C-7 of M C M S at S L

Seventh Annual Officers, Trustees, and Commissioners Conference was held at Salishan Lodge, February 24-26. It was a pleasant and valuable meeting.

Advantages of an unhurried meeting, with family participation, at a distance from Portland assuring insulation from distraction, have been well demonstrated by Multnomah County Medical Society. The meeting at Salishan last month was planned according to the successful formula developed for the first of the series and changed very little in the interim. An informal dinner on a Thursday evening provides opportunity for personal greetings and re-

Upper: the Judicial and Business Commission considered several controversial issues. Most spirited debate arose over the problem of hospital emergency room staffing. Lower: family participation was in evidence at the panel discussion. Panelists, led by Max Parrott, were, l to r, Rex E. Kenyon, Oklahoma City, Mr. Don Blair, Executive Secretary, Oklahoma Medical Association, Mr. Robert Elsner, Executive Secretary, Multnomah County Medical Society, Dr. Parrott, Milford O. Rouse, Dallas, Texas, President-Elect AMA, Clinton S. McGill, President-Elect, MCMS.

Rex E. Kenyon, M.D., Oklahoma City, feature speaker at the Saturday luncheon.

Max Parrott, M.D., AMA Trustee, introduced Milford Rouse, M.D., AMA President-elect.

newal of family friendships. Business gets underway in good time the next morning.

A prominent guest speaker brings an important, usually national, message at luncheon, and the afternoon is free. Another important guest speaker addresses the group at the Saturday evening dinner and the Board of Trustees holds a regular business session Sunday morning. Particular attention is given to reports from the chairmen of the committees and commissions that held discussions on Saturday.

Milford O. Rouse, President-Elect of the American Medical Association gave the address at the Saturday noon luncheon this year. He urged more forthright participation of physicians in activities of organized medicine and deplored the tendency of some to ignore their responsibilities to the public through medical organization and their similar responsibilities through community and religious organizations. He had unstinted praise for medical leaders, mentioning as an example Oregon's own Raymond M. McKeown, but made a strong plea for "followership" to complement the leadership which has been excellent. Leaders alone cannot solve problems or create better conditions. Activity on the part of every member of the organization is needed—urgently.

Rex Kenyon, of Oklahoma City, and President of the other OMPAC, the Oklahoma Medical Political Action Committee, was a popular repeat guest speaker. He appeared at the 6th Annual OTCC last year. His highly entertaining speech about making speeches was a many-layered sandwich of wit and sound common sense. From his witty response upon being introduced, until his abrupt, well timed close, he held undivided audience attention. Appreciation was expressed by the Society on Sunday morning when he was made an honorary member of Multnomah County Medical Society.

The 8th annual OTCC of MCMS will be held at Salishan next year, March 1-3, 1968.

A Doctor's Wife for a doctor's wife. Mrs. Milford Rouse was the pleased recipient of a rose for her garden—presented by Mrs. William V. Zartman, President of the Woman's Auxiliary of OMA. The Auxiliary owns patent rights on the appropriately named rose and will devote profit from its sale to the Medaux Park Program.

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PRESIDENT'S page

JOHN E. TYSELL, M.D.

Centennial Celebration In Oregon

The Oregon Medical Association joins with our medical school and all friends of medicine in Oregon in celebrating the centennial of medical education in Oregon. E. G. Chuinard, able chairman, and his Committee on Medical History deserve a tribute for a job well done. Dean Baird and his staff have given substantial assistance.

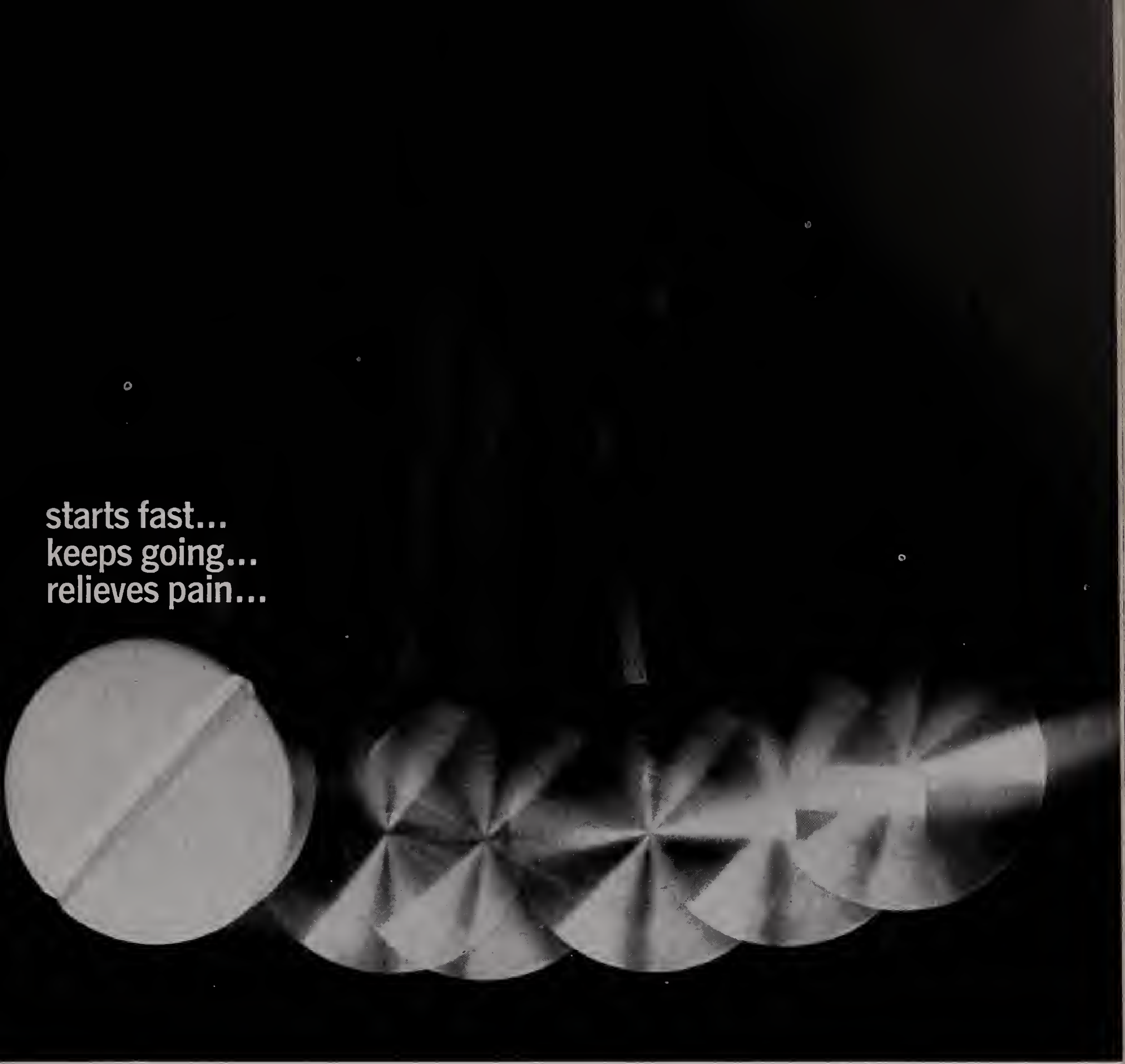
It is fitting that the first event of the observance was the unveiling and presentation of a portrait of Bertha Hallam at the Medical School Library, March 3. It was commissioned by her many friends in medicine. As long-time librarian of the medical school, she has cheerfully and ably assisted medical students of all ages. Doctors, not only at the school, but all over the Northwest are in her debt.

The Oregon Medical Association has been deeply and continuously involved in the problems of medical education since its founding in the fall of 1874. One of its first acts was to form a committee on medical education. Horace Carpenter, in his presidential address in 1879, even proposed that the Association found its own medical school.

Through the years discussions on medical and educational policy have been vigorous and, at times, violent. Judging by the result, we must agree that the discussions have been fruitful.

During the past one-hundred years literally thousands of issues have been debated by the doctors of Oregon and policy stands have been taken through the democratic framework of the Medical Association. To the diminishing numbers of our members who have told me that they do not belive in our being involved, I can only say that I am proud and grateful for our medical heritage. Let us all join together to preserve and improve it for the benefit of our children. ■

John E. Tysell M.D.



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Data Processing Techniques to be Explained

"Computers and Medicine—Is the Show Worth the Price of Admission?" is the course offered by the UOMS April 27.

Several questions will be discussed during the course, among them: Can data processing techniques assist the health profession give better care to patients? If so, what practical uses are now available and financially feasible? If data processing is beneficial, how should an individual or organization start a program? What are the equipment and personnel needs?

The main topics presented will be: 1. Starting a data processing program 2. Data Processing and the clinical laboratory.

Registration is 8 a.m. at the University of Oregon Medical School Library Auditorium.

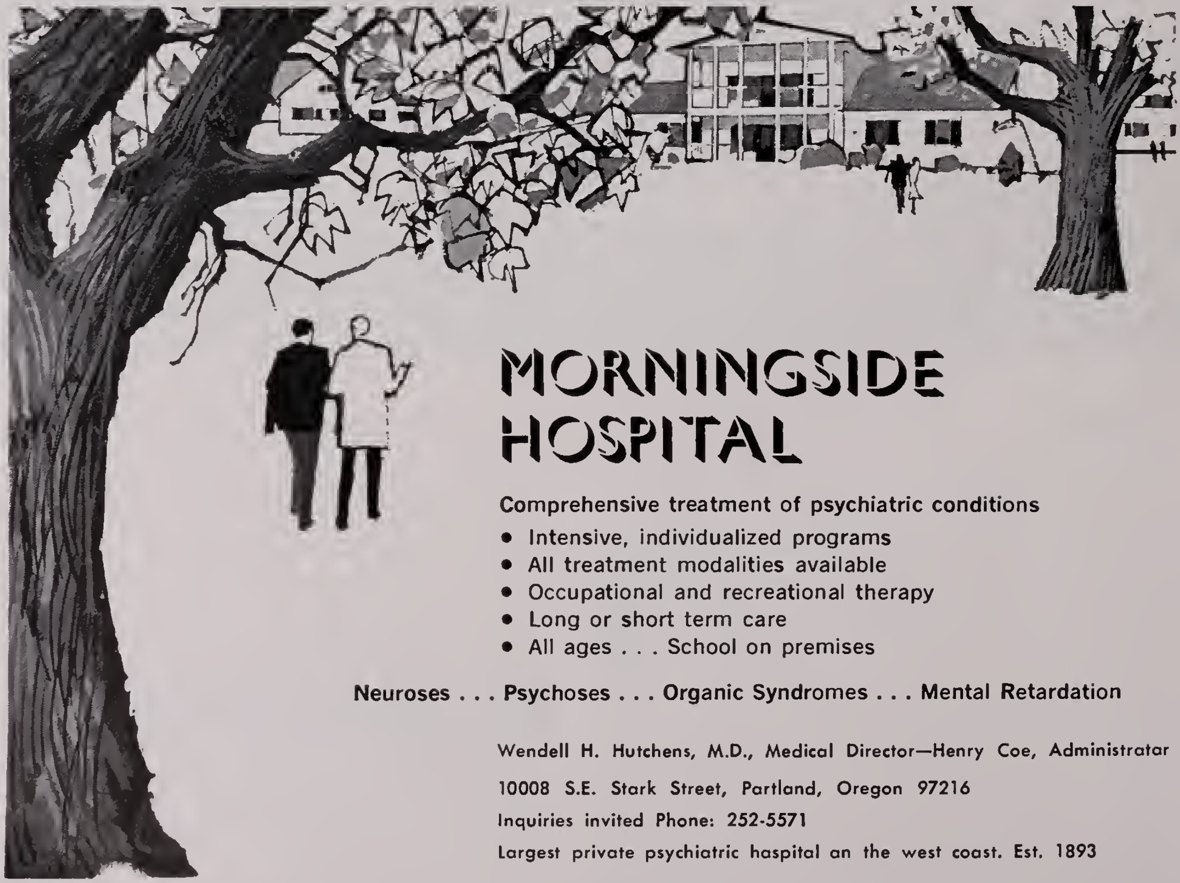
OBITUARIES

DR. ALFRED BERTRAM PEACOCK, *Eugene, Oregon, died Dec. 10, 1966. He was 74. Dr. Peacock was born in Louth, England. He was a 1921 graduate of the University of Oregon Medical School in Portland. Cause of death was Lymphosarcoma.*

DR. MAX HIMMELFARB, *65, died Nov. 3, 1966, in Portland. He was a graduate of the University of Nebraska College of Medicine in Omaha. He interned at Metropolitan Hospital, New York City, in 1926-27, and was licensed to practice in Oregon in 1927. He had practiced in Portland until his death. Dr. Himmelfarb served in the Army from 1942 to 1946. Cause of death was cardiac arrest with venticular fibrillation due to coronary thrombosis.*

DR. PAUL B. HANSEN, *73, of Portland, died Dec. 28, 1966. He was graduated from the North Pacific College of Oregon in dentistry in 1924 and the University of Oregon Medical School in 1932. He practiced medicine until his death. He was a veteran of World War I. Cause of death was myocardial failure due to generalized artereosclerosis.*

DR. HARRY E. SHOOT, *Portland, died Nov. 12, 1966. He was 79. He was a 1911 graduate of University of Oregon Medical School and subsequently set up practice in Portland, where he lived until his death. He was a member of the American College of Surgeons. Cause of death was arteriosclerotic heart disease.*



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WASHINGTON

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PRESIDENT	*Lucius D. Hill, M.D., Seattle*
SECRETARY	*Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY	*Mr. R. F. Gorman, Seattle*

Annual meeting, September 10-13, 1967, Seattle

Scientific Papers for Annual Meeting

Physicians who have a scientific paper they want considered as part of the program during the September 10-13 Annual Meeting, are encouraged to submit a two or three paragraph abstract as soon as possible. Abstracts should be mailed to Paul W. Herron at the Washington State Medical Association office, 444 N.E. Ravenna Boulevard, Seattle, Washington 98115.

A portion of the scientific program will be devoted to intensive care and patient monitoring. There will be three general scientific sessions, and specialty scientific sessions on Anesthesiology, ENT, Internal Medicine, OB-GYN, Ophthalmology, Pediatrics, Psychiatry and Surgery. The Scientific Program Committee, under the chairmanship of Dr. Herron, must determine soon the final content of the program, and committee members representing the major specialties want to review all abstracts within the next month.

Deadline Set for Exhibit Space

Physicians who have requested applications for scientific exhibit space at the 1967 WSMA Annual Meeting should return the completed application to the Central Office by April 15. Those planning exhibits still may obtain applications from the Washington State Medical Association office, 444 N.E. Ravenna Boulevard, Seattle, Washington 98115.

The Aesculapius Award will again be presented to the author of the outstanding exhibit selected from among those accepted for showing, says John D. Allen, Chairman, Scientific Exhibit Committee. The award, jointly sponsored by the WSMA and Mead Johnson Laboratories, is a $200 cash prize and a certificate inscribed with the author's name and exhibit title.

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Special Course for Internists

An intensive course in Nephrology and Chronic Dialysis for qualified practicing internists has been announced by the University of Washington and the Seattle Artificial Kidney Center. It will begin May 1.

The course is sponsored by the Division of Chronic Diseases of the U. S. Public Health Service and will last from 3 weeks to 3 months, depending on the training and experience of the applicant. A stipend of up to $1,000 per month is available.

The faculty is the Division of Nephrology of the University of Washington, which includes the staff of the Seattle Artificial Kidney Center. The course will include intensive didactic and practical experience in fluid and electrolyte balance, clinical nephrology, and the management and training of patients for chronic dialysis in a center setting or in the home.

For further information, contact the Division of

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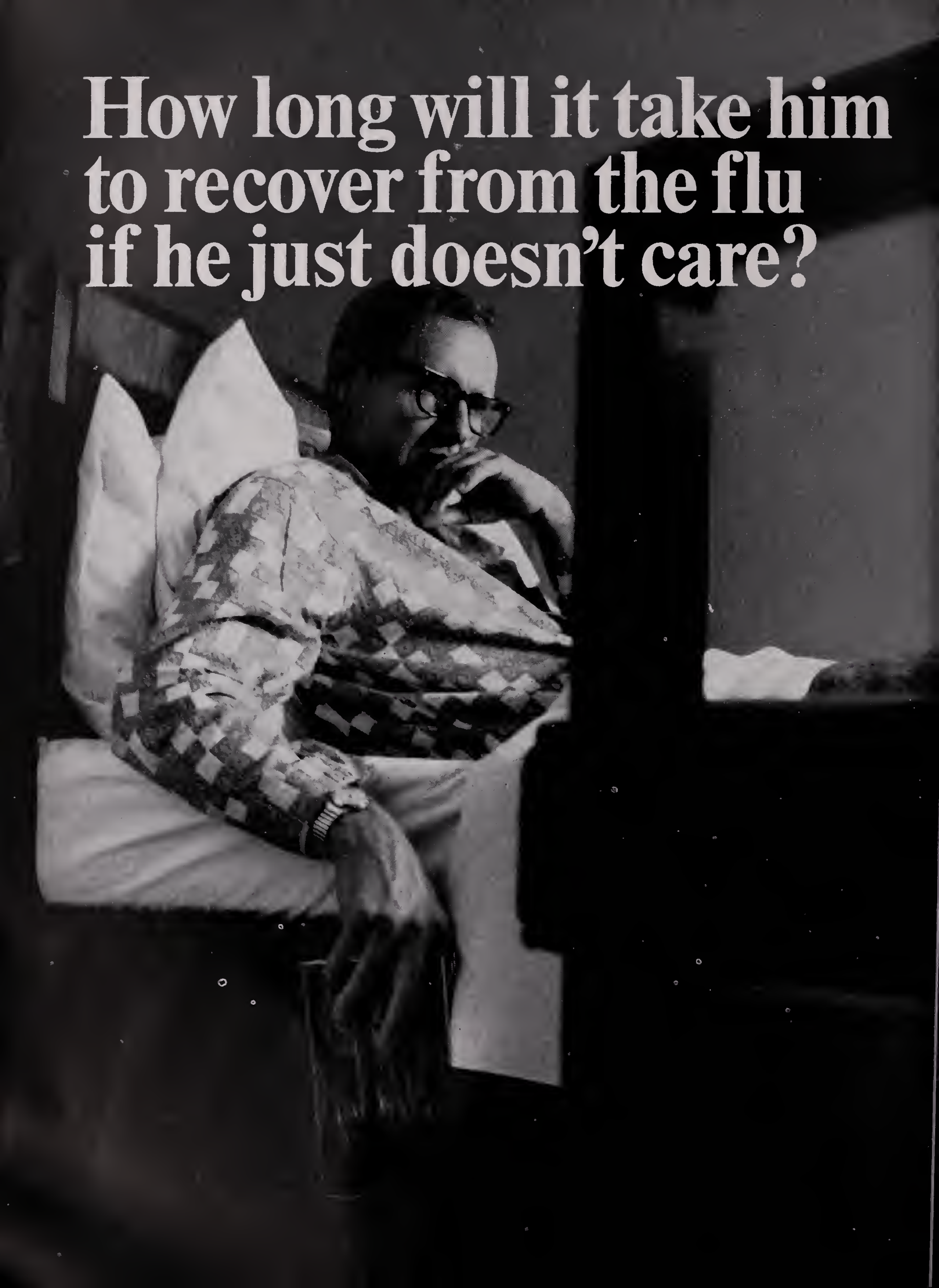
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*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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Continuing Medical Education, University of Washington School of Medicine, Seattle, Washington 98105.

Academy of General Practice to Meet

Physicians will concern themselves with the teenager at the annual meeting of the Washington Academy of General Practice scheduled for May 26 and 27 at the Olympic Hotel, Seattle. "Teenage Topics" is the theme of the meeting featuring eight speakers on the various aspects of adolescent growth and development.

Spokane Surgical Society to Meet April 8

The annual meeting of the Spokane Surgical Society will be held April 8 at the Davenport Hotel in Spokane. Guest speakers will be Julian Johnson, Professor of Surgery, University of Pennsylvania; and K. Alvin Merendino, Professor of Surgery and Chairman, Department of Surgery, University of Washington.

Program

8:00 a.m. Formal opening of the meeting
Charles R. Cavanagh, Jr., Spokane, President

8:10 a.m. *Pulmonary Insults in Medicine and Surgery*
Moderator: Ralph Berg, Jr., Spokane
Panelists: Julian Johnson, K. Alvin Merendino, and S. Thatcher Hubbard, Sr., Spokane

9:30 a.m. *Meckel's Diverticulum—13 Year Experience at Sacred Heart Hospital*
Carl P. Schlicke, Spokane

9:45 a.m. *Surgical Treatment of Cerebrovascular Insufficiency*
Richard N. Kleaveland, Spokane

10:00 a.m. *Cosmetic Surgery*
David E. Sullivan, Spokane

10:15 a.m. *Recent Advances in the Treatment of Shock*
George W. Girvan, Spokane

10:45 a.m. *Thoracic Aneurysms—Diagnosis and Treatment*
Waverly J. Ellsworth, Jr., Spokane

11:00 a.m. *New Procedures in Reconstructive Surgery of the Ear*
J. Thomas Rulon, Spokane

11:15 a.m. *Postoperative Wound Infection*
Peter Grabicki, Spokane

11:30 a.m. *Discussion of Morning Papers*
Julian Johnson, Philadelphia

12:00 noon Luncheon—Isabella Room
What Does the Surgeon Have to Offer the Patient with Carcinoma of the Esophagus?
Julian Johnson, Philadelphia

1:45 p.m. *Current Therapy of Perforated Peptic Ulcers—Changing Concepts*
Richard E. Elston, Spokane

2:00 p.m. *Indications For and Use of Inferior Vena Cava Clip*
Richard E. Ahlquist, Jr., Spokane

2:15 p.m. *Recent Advances in Myocardial Revascularization—An Experimental Background*
John E. Hershey, and Manuel White, Spokane

2:30 p.m. *Myocardial Revascularization*
Robert W. Kendall, Spokane

2:45 p.m. *Discussion of Afternoon Papers*
Julian Johnson, Philadelphia

3:15 p.m. Panel Discussion: *Hiatal Hernia*
Moderator: Edward V. Johnston, Spokane
Panelists: Julian Johnson, Philadelphia
K. Alvin Merendino, Seattle
Arch Logan, Jr., Spokane

4:00 p.m. *The Management of Spontaneous and Iatrogenic Perforations of the Esophagus*
Julian Johnson, Philadelphia

7:30 p.m. Banquet
Pioneering Cardiac Surgery in India
Julian Johnson, Philadelphia

UWSM Schedules Two Courses for April

The Continuing Medical Education division of the University of Washington School of Medicine is offering several courses this spring. Among them are two slated for next month.

"The Law—Social Workers and Families in Stress," will be held April 13 and 14. This symposium will deal with our laws and how they affect juveniles, adults, the emotionally ill, and the indigent and their families. It is open to social workers as well as physicians and, in addition, those interested in or working with persons who are in conflict with, or affected by, the laws.

The guest faculty includes lawyers, social workers, officials of state institutions, and law enforcement officials. Registration is $20.

"Medical Aspects of Learning Problems" is the course scheduled for April 20-21. This two-day session is designed to provide a review for the physician of medical aspects of learning problems, a presentation of contributions of other professions, and a greater understanding of the necessity for a continuing cooperative relationship between the school personnel and physicians.

Among the subjects to be discussed are General Problems of Diagnosis, The Neurological Viewpoint, Ophthalmological Viewpoint, Psychiatric Viewpoint, Speech Pathology, and Cooperative Relationships between Schools and Physicians.

Tuition fee for the course is $40.

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PRESIDENT'S page

LUCIUS D. HILL, III, M.D.

Health Measures Keep WSMA Busy

Of the more than 1,600 bills introduced into the 40th session of the state legislature, approximately 95 House bills and 50 Senate bills are closely related to the health field. Because of the impact these bills might have, if passed, on the practice of medicine and related fields, they have been closely watched by the Washington State Medical Association. The Association, after careful deliberation, has taken a position on approximately half of the measures and has participated in hearings before the Committees handling these bills.

The process by which the Association takes a position on a health measure is a deliberate one. Each measure is considered by the Association's own committee dealing with the subject matter of the bill. For example, a measure dealing with mental health is first reviewed by the Mental Health Committee. Their recommendations are forwarded to the Public Laws Committee. The recommendations of both of these groups are then forwarded to the Executive Committee. Bills of major importance have often been reviewed by the entire Board of Trustees. Bulletins have been issued to the entire membership every three to four weeks during the legislative session, stating the purpose of the bills and the position the Washington State Medical Association has taken. Whenever feasible, the reasons for the position taken are also presented to the entire membership. Special bulletins are sent to the WSMA committees dealing with particular fields. Reports to the county and medical society officers have been sent at frequent intervals before bills have come up for hearings. A roster of physicians who have particular interest in various health fields, has been maintained in Olympia. Those physicians known to be interested in and knowledgeable about a measure are directly consulted by our legislative director. After all of these groups have been consulted, the Association's position becomes clear.

Many letters from members have been received which relate to specific bills. The majority of these have been highly in favor of the Association's position. Some letters have also been highly critical of the Association's position and constructive criticism is welcomed and helpful. Members with special interest and knowledge concerning measures before the legislature have been invited to participate in the committee discussions and in many instances have been invited to Olympia to testify before the House and Senate Committees.

The ultimate effect of the efforts of the Association will only be known when the legislature has adjourned. Thus far, however, the Association has obtained favorable decisions on measures which promote better health and have been able to, by and large, prevent passage of measures unfavorable to the health of the citizenry. WSMA effectiveness has been aided greatly by the participation of the membership, and, in no small measure, by the work of AMPAC, which has had a favorable impression on the legislators and senators. The effectiveness of our effort is also aided by the fact that the Association has taken a broad position on measures and has earned the reputation of considering each measure on its own merit and not simply from the standpoint of physicians alone. For this reason, the Association's opinion has been sought on nearly every health measure introduced into the legislative session. Our ultimate position on each measure has been based on the simple proposition —namely, is the measure good for the health of the citizens of the State of Washington? ■

Lucius Hill M.D.

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Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

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continued from page 276

Statement of the WSMA Re: House Bill No. 263

Mr. Chairman and Members of the Committee:

I am Dr. Lucius Hill, President of the Washington State Medical Association, representing 3200 practicing physicians from all areas of the State of Washington.

I would first like to assure every member of the Committee that the practicing physicians favor passage of House Bill 263. The physician, faced as he is, day to day, with human ailments, realizes the great debt he owes to animal research. The conquest of typhoid, small pox, poliomyelitis and malaria, to mention a few, are diseases conquered through animal research. Every person in this room has benefited either directly or indirectly through animal reseach. Our understanding of the human as well as animal function would never have come about without such research.

As emphasized by Dr. Thomas Guilfoil, animal research as benefited animals as well as humans. The understanding of animal disease and the care of animals has been greatly improved through animal research. To say that animal research must stop is naive. The progress and understanding of human and animal diseases will cease with the cessation of research. Therefore, it is urgent for us to facilitate research in every way possible. This, House Bill 263 does.

Each year in the state of Washington, it is estimated that some 20,000 animals are killed without serving a useful purpose, whereas the research animal is a noble being who offers himself that both humans and animals may enjoy a better life on this earth. Those who speak of the cruelty and suffering in research laboratories are unaware of the conditions in the present day research facility. They point out specific instances of abuse in the past, which, by and large, no longer exists. Operations in the present day research facility are conducted in the same manner as human operations, under optimum conditions of sterility and with modern anesthesia which is entirely painless. Many research animals are maintained in the research facility after operation in excellent condition and pain free. The research animal makes a great contribution to both man and animal.

It behooves us, therefore, to care for animals as painstakingly as possible. House Bill 263 provides for the upgrading of care of these animals at all levels. It is worth emphasizing that the Bill, for the first time, specifies painless termination for animals rather than under the present situation where the method of destroying an animal is not specified or brought under the law. Pet lovers should take heart that the Bill for the first time specifies a five-day retention period in the pound. At present, animals are held for only three days and then, by law, may be destroyed. House Bill 263 adds two more days for recovery of animals that are wanted by owners.

Under this Bill, for the first time in this state, institutions requiring the use of live animals for effective carrying out of research must be certified. This certification cannot be obtained until the state veterinarian has inspected the facility and approves it as meeting the standards for humane care of animals. This certification may be cancelled, as you have already heard, at any time, when the institution fails to meet the standards created by the Department of Agriculture. This Bill is therefore more rigid than the federal law in upgrading animal care in that it extends the legal responsibility for the humane treatment of animals from animal dealers and research institutions to all pounds and all institutions and individuals using animals for research, diagnosis or treatment. It provides state administration in addition to federal and annual licensing instead of simple registration. In short, this Bill expands the rather strict regulations of the federal law and by so doing, further upgrades the care of animals in this state.

The issue at stake here is clearly whether or not unwanted, unclaimed animals should be destroyed without purpose or whether they should be made available for research under humane conditions and thereby render a great service to both man and animal by advancing the knowledge of both human and veterinarian medicine.

House Bill 263 will stop dognapping and nefarious trade in animals, which is now outside the law.

In the interest of both human and animal health, I urge that you pass House Bill 263.

Statement of the WSMA Re: House Bill No. 460

Mr. Chairman and Members of the Committee:

In January 1966, the National Municipal League, in a report entitled "Best States For a Murder", listed the State of Washington as one of 13 where "lax conditions still prevail in the investigation of unexplained deaths." Fifteen years ago these lax conditions were commonplace—a state of affairs which inspired the National Municipal League to study the problem and recommend methods for improving the situation. The result was a joint study undertaken by the Municipal League, the American Bar Association, the American Academy of Forensic Sciences, the American Judicature Society, the American Medical Association, the College of American Pathologists, the National Civil Service League and the Society of Medical Jurisprudence.

The findings and recommendations were published in a 40-page booklet entitled "Model State Medical Legal Investigative System." Three years later, the National Conference of Commissioners for Uniform State Laws published a model act based upon this study.

The office of Coroner was set up years ago in England as a judicial post to settle some of the problems brought about by the sudden and unexpected death of important persons. He would collect evidence concerning the circumstances of death, and supervise the disposition of the dead man's belongings. Scientific methods of investigation were unknown and the method of investigation consisted of interrogating witnesses.

The task is much more complex today. The Coroner or Medical Examiner is charged with the investigation of unexplained death of all persons—not just important persons. He is expected to detect industrial hazards and to reconstruct the cause of death in cases of strange diseases, accidents and homicides. He has available to him in this task a remarkable variety of scientific tools to do his job properly. Today's Coroner or Medical Examiner must be a scientific medical investigator.

Why is it that in Washington State the Coroner is rarely a scientifically trained investigator? One reason is that a Coroner must devote considerable time to attending political functions and running for election. This sort of activity does not attract scientists and is not required of other scientifically trained public servants such as public health doctors. In addition to this, the county is too small a political unit to support the necessary scientific laboratories. To set up such facilities in every county in the state would be wasteful duplication. Since dead men tell no tales, there is little opportunity for the general public to be aware of deficiencies in this function of their government, but from time to time, people in a position to know, have spoken out and we have seen proposals for reform advanced by law enforcement organization, physicians, coroners, and public health officers.

Generally, these efforts have been sporadic and uncoordinated. Several years ago, the Washington State Medical Association undertook to re-examine the problem in this state. With the help of Dr. Earl Benditt, Professor and Director of the Department of Pathology at the University of Washington Medical School, Prof. Allen Moritz, the nation's leading authority on this subject, was persuaded to come to Seattle and review the problem with us and with the Bar Association, Prosecuting Attorneys, Coroners, and others interested in the subject. House Bill 460 is the final result of the study of this problem as it exists in our state.

The bill establishes a Commission of knowledgeable people to set up and supervise the proposed State Medical Examiner system. A model laboratory headed by a chief medical examiner would be set up by the Commission. The facilities would serve the entire state. County medical investigators would make preliminary investigations in cases of their own community, and would determine when an autopsy should be done—acting under the general guidance and supervision of the State Medical Examiner.

Regional medical examiners would perform the required autopsies. In most parts of the state, these men would be working part-time and would be the same pathologists who are called upon by the County Coroner now. Under the proposed system, these pathologists would have the guidance and support of a model state laboratory directed by a Board-qualified, forensic pathologist. As it is now, in most cases, physicians performing these autopsies work alone and report to a County Coroner who is in no position to help them or to judge the standards of their performance.

The cost of such a program can be estimated by examining the budgets of states and counties where it is in operation. In our study, we found that while the State of Maryland spent 12 and 1/2 cents per capita per year for a top-notch medical examiner system, taxpayers of Washington were paying approximately 12 cents per capita per year for a system which leaves much to be desired. Dade County, Florida, operates a medical examiner system recognized nationally for its excellence. In 1961, Dade County performed 40 per cent more autopsies and 90 per cent more toxicological tests than were performed by the King County Coroner's office. In that year, the Dade County medical examiner budget was $182,121 and the King County Coroner's budget was $189,803. Since these costs have been borne by counties in Washington State in the past, H.B. 460 provides for the state to set up the program and get it going, then charge the counties for its future operations on a pro-rata basis according to the number of cases investigated in each county.

The main thrust of our arguments is not economy. Rather, it is to improve services to the people. Without some form of scientific approach to the problem of sudden and unexpected death, there remain these hazards to the community: the non-recognition of murder, the accusation of innocent persons, the unjust assignment of blame in case of accidental death, faulty administration of civil justice, and the ignorance of otherwise preventable hazards to public health.

GORDON D. LAZERTE, M.D.

Dr. Swanson New Associate Dean of UWSM

August G. Swanson, M.D., has been appointed associate dean of the University of Washington School of Medicine and now will be in charge of student and curricular affairs.

Dr. Swanson succeeds Charles W. Bodemer, M.D., who will devote full time to his position as associate professor of Biomedical History and as head of the Division of Biomedical History.

Dr. Swanson leaves a position as associate professor of Medicine and head of the Division of Neurology. In 1959 he was named a Markle Scholar in Medical Science and used part of the $30,000 award to develop a training program for students interested in the care of children's neurological problems.

continued on page 289

Norinyl® tablets

(norethindrone 2 mg. c̄ mestranol 0.1 mg.)

for multiple contraceptive action that has produced a record of unexcelled effectiveness

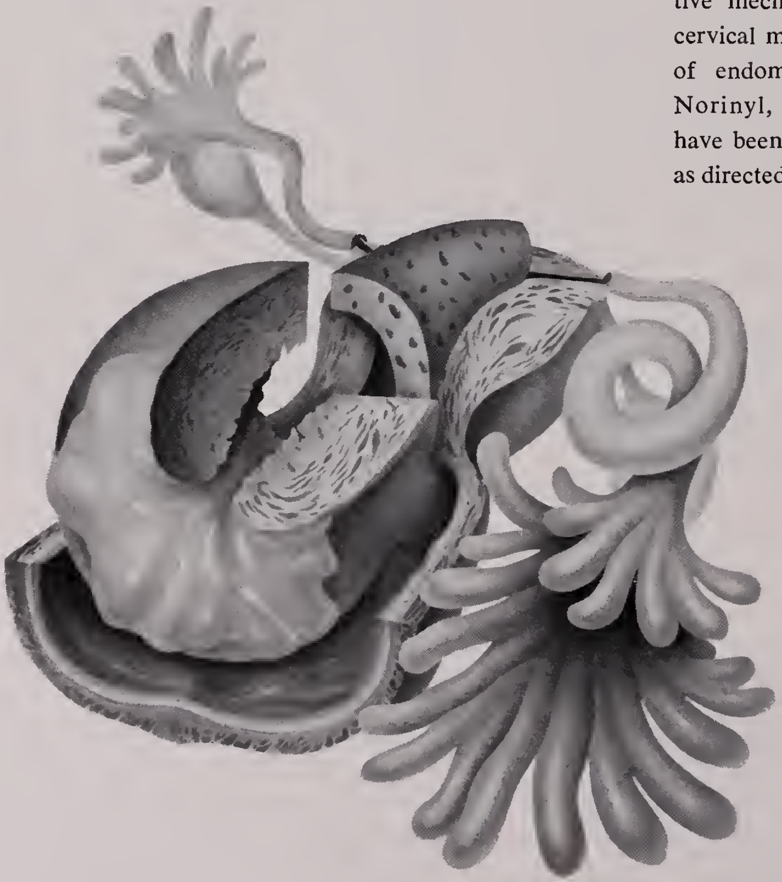
inhibition of ovulation by means of 2 time-proved hormonal agents

production of a cervical mucus hostile to sperm motility and vitality

creation of an endometrium unreceptive to egg implantation

no unplanned pregnancies

Norinyl provides multiple action for maximum assurance of success. It does not depend on ovulation inhibition alone for contraceptive effectiveness. The mechanism of action of combined hormonal therapy results in ovulation inhibition reinforced by other protective mechanisms, including a hostile cervical mucus[1-13] and an acceleration of endometrial changes.[1-3,7-16] With Norinyl, no unplanned pregnancies have been reported to date when used as directed.



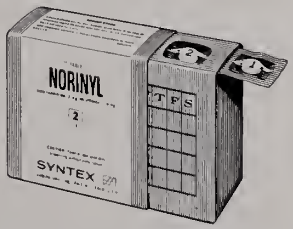
plus important supportive benefits that help her through those critical early months of oral contraception

low incidence of side effects

Low incidence of BTB and spotting, nausea and amenorrhea tends to minimize side effect problems and increases patient cooperation.

no confusion about dosage

An unbreakable "confusionproof" package makes it easy to adhere to prescribed dosage schedule: individually sealed tablets numbered from 1 through 20 *plus* monthly calendar record enables patient to double-check dosage intake by day and corresponding tablet number.



Contraindications: Thrombophlebitis or pulmonary embolism (current or past). Existing evidence does not support a causal relationship between use of Norinyl and development of thromboembolism. While a study which was conducted does not resolve definitively the possible etiologic relationship between progestational agents and intravascular clotting, it tends to confirm the findings of the Ad Hoc Advisory Committee appointed by the Food and Drug Administration to review this possibility. Cardiac, renal or hepatic dysfunction. Carcinoma of the breast or genital tract. Patients with a history of psychic depression should be carefully studied and the drug discontinued if depression recurs to marked degree. Patients with a history of cerebral vascular accident.

Warning: Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn.

Precautions: By May 1963, experience with norethindrone 2 mg.—mestranol 0.1 mg. had extended over 24 months. Through miscalculation, omission or error in taking the recommended dosage of Norinyl, pregnancy may result. If regular menses fail to appear and treatment schedule has not been adhered to, or if patient misses two menstrual periods, possibility of pregnancy should be resolved before resuming Norinyl. If pregnancy is established, Norinyl should be discontinued during period of gestation since virilization of the female fetus has been reported with oral use of progestational agents or estrogen. When lactation is desired, withhold Norinyl until nursing needs are established. Existing uterine fibroids may increase in size. In metabolic or endocrine disorders, careful clinical preevaluation is indicated. A few patients without evidence of hyperthyroidism had elevated serum protein-bound iodine levels, which in the light of present knowledge, does not necessarily imply hyperthyroidism. Protein-bound iodine increased following estrogen administration. Bromsulphalein retention has occurred in up to 25% of patients without evidence of hepatic dysfunction. Studies from 24-hour urine collections have shown an increase in aldosterone and 17-ketosteroids and decrease in 17-hydroxycorticoid levels. Thus, Norinyl should be discontinued prior to and during thyroid, liver or adrenal function tests. Because progestational agents may cause fluid retention, conditions such as epilepsy, migraine and asthma require careful observation. Thus far no deleterious effect on pituitary, ovarian or adrenal function has been noted; however, long-range possible effect on these and other organs must await more prolonged observation. Norinyl should be used with caution in patients with bone, renal or any disease involving calcium or phosphorus metabolism.

Side Effects: Intermenstrual bleeding; amenorrhea; symptoms resembling early pregnancy, such as nausea, breast engorgement or enlargement, chloasma and minor degree of fluid retention (if these should occur and patient has not strictly adhered to medication plan, she should be tested for pregnancy); weight gain; subjective complaints such as headache, dizziness, nervousness, irritability; in a few patients libido was increased. In a total of 3,090 patients, 2.2% discontinued medication because of nausea.

NOTE: See sections on contraindications and precautions for possible side effects on other organ systems.

Dosage and Administration: One Norinyl tablet orally for 20 days, commencing on day 5 through and including day 24 of the menstrual cycle. (Day 1 is the first day of menstrual bleeding.)

Availability: Dispensers of 20 and 60 tablets; bottles of 100.

References: **1.** Council on Drugs. JAMA 187:664 (Feb. 29) 1964. **2.** Bryans, F. E.: Canad Med Ass J 92:287 (Feb. 6) 1965. **3.** Goldzieher, J. W.: Med Clin N Amer 48:529 (Mar.) 1964. **4.** Cohen, M. R.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965. **5.** Hammond, D. O.: Ibid. **6.** Rice-Wray, E., Goldzieher, J. W., and Aranda-Rosell, A.: Fertil Steril 14:402 (Jul.-Aug.) 1963. **7.** Goldzieher, J. W., Moses, L. E., and Ellis, L. T.: JAMA 180:359 (May 5) 1962. **8.** Kempers, R. D.: GP 29:88 (Jan.) 1964. **9.** Tyler, E. T.: JAMA 187:562 (Feb. 22) 1964. **10.** Rudel, H. W., Martinez-Manautou, J., and Maqueo-Topete, M.: Fertil Steril 16:158 (Mar.-Apr.) 1965. **11.** Flowers, C. E., Jr.: N Carolina Med J 25:139 (Apr.) 1964. **12.** Goldzieher, J. W.: Appl Ther 6:503 (June) 1964. **13.** The Control of Fertility. Report adopted by the Committee on Human Reproduction of the American Medical Association. JAMA 194:462 (Oct. 25) 1965. **14.** Flowers, C. E., Jr.: JAMA 188:1115 (June 29) 1964. **15.** Merritt, R. I.: Appl Ther 6:427 (May) 1964. **16.** Newland, D. O.: Paper presented at Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965. Reported in Med Sci 16:26 (Nov.) 1965.

norethindrone—an original steroid from

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LABORATORIES INC., PALO ALTO, CALIF

Norinyl® tablets

(norethindrone 2 mg c̄ mestranol 0.1 mg)

for multiple contraceptive action

in digestive disorders:

B and C vitamins aid therapy. Nausea, vomiting, and severe diarrhea may seriously interfere with the digestion and absorption of nutrients. STRESSCAPS capsules, containing therapeutic quantities of vitamins B and C, may help meet the needs of these patients. In digestive disorders, as in many stress conditions, STRESSCAPS vitamins aid therapy.

Stresscaps®

Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York

Lederle

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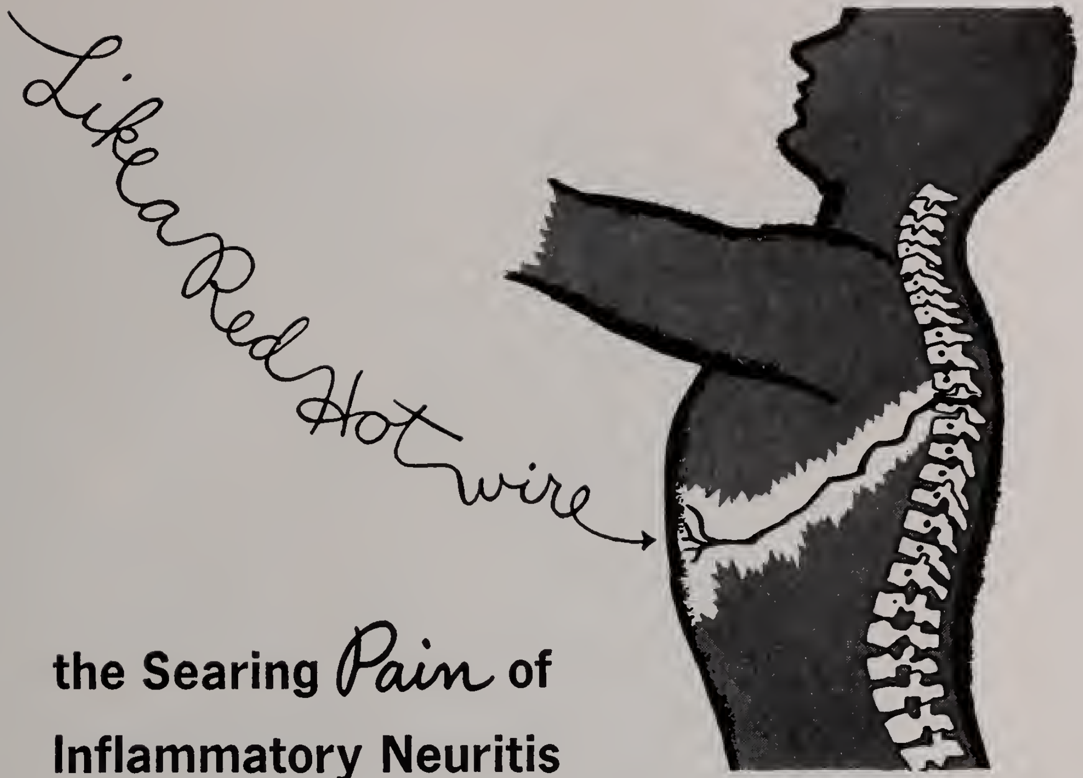

Like a Red Hot wire

the Searing *Pain* of Inflammatory Neuritis

PROTAMIDE®

colloidal solution
of denatured
proteolytic enzyme

provides the *selective* fast-acting relief . . .

Repeatedly in published clinical studies,[1-10] investigators stress the following therapeutic characteristics:

- relief of inflammatory pain (non-traumatic) is prompt—particularly when administered early.[1-4]
- disability time is shortened from weeks to days.[7]
- so specifically effective is Protamide that a positive response is diagnostic of inflammatory neuritis.[3,4]
- prompt relief is observed even in ophthalmic herpes zoster.[5,6]
- incidence of sequelae such as postherpetic neuralgia is reduced.[1-4]
- consistently described as the therapy of choice.[1,3-6]

Administration:

In neuritis and herpes zoster, one ampul I.M. daily for 2 to 5 days usually relieves pain completely in patients treated early. Well tolerated.[1-10] However, inadvertent intravenous administration may cause anaphylactoid reaction.

—Boxes of 10 ampuls, 1.3 cc. each.—

References: (1) Baker, A. G.: Penn. Med. J. *63*:697-698 (May) 1960. (2) Smith, R. T.: New York Med. 8:16-19 (Aug. 20) 1952. (3) Smith, R. T.: Med. Clin. N. America (March) 1957. (4) Lehrer, H. W.; Lehrer, H. G., and Lehrer, D. R.: Northw. Med. *54*:1249-1252 (Nov.) 1955. (5) Sforzolini, G. S.: Arch Ophthal. *62*-381-385 (Sept.) 1959. (6) Shupala, E.: W. Virginia Med. J. *56*:191-193 (June) 1960. (7) Xander, G. W.: Western Med. *1*:14-17 (Sept.) 1960. (8) Combs, F. C., and Canizares, O.: New York J. Med. (Mar. 15) 1952, pp. 706-708. (9) Marsh, W. C.: U.S. Armed Forces Med. J. *1*:1045 (Sept.) 1950. (10) Love, T. R.: Rocky Mountain Med. J. *50*:873 (Nov.) 1953.

Sherman Laboratories
Detroit, Michigan 48211

"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"

The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

The full ¼ grain of phenobarb in the formula
takes the nervous edge off the pain
...helps bring out the best in codeine

Phenaphen® with Codeine

the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.)	16.2 mg.
(Warning: may be habit forming)	
Aspirin (2½ gr.)	162.0 mg.
Phenacetin (3 gr.)	194.0 mg.
Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A·H·ROBINS

A. H. ROBINS CO., INC., Richmond, Va. 23220

continued from page 281

Obstetricians to Meet

The Washington State Obstetrical Association will hold its Spring Meeting Saturday, April 8, at Harrison Hot Springs, British Columbia, Canada.

Guest speakers for the meeting are William J. Dignam, professor of Obstetrics and Gynecology, University of California School of Medicine, Los Angeles; and Willard M. Allen, Professor of Obstetrics and Gynecology, Washington University School of Medicine, St. Louis, Missouri.

OBITUARIES

DR. DOLF SIMONS, *Mercer Island, Washington, died Dec. 27, 1966. He was 72. Dr. Simons was born in Germany and was graduated in 1920 from Medizinsche Fakultat der Johann - Wolfgang - Goethe - Universitat, Frankfurt-Am-Main. He was licensed to practice in Washington in 1939. Cause of death was carinoma of the colon.*

DR. DAVID L. BASSETT, *Seattle, died Nov. 17, 1966, at the age of 52. Dr. Bassett was a member of the Medical School Faculty at the University of Washington. He was a 1939 graduate of Stanford University School of Medicine, Palo Alto, Calif. Cause of death was respiratory failure due to Amyloidosis with Marcroglobulinemia.*

DR. FRED T. RUCKER, *Sherwood, Washington County, Oregon, died Nov. 22, 1966. He was 86. Dr. Rucker was born in Lineville, Iowa, and was a 1905 graduate of Keokuk Medical College, College of Physicians and Surgeons. Dr. Rucker served in World War I as a medical officer. He began practicing in Sherwood in 1922. Cause of death was carcinoma of the tongue.*

DR. CHARLES GARNET TRIMBLE, *Des Moines, Washington, died Oct. 25, 1966, at the age of 82. He was a graduate of Northwestern University Medical School, Chicago, in 1910. He was licensed in 1927 but had retired at the time of his death. Cause of death was Encephalomalacia due to cardial vascular disease and diabetes.*

D.R. BERNECE VICTOR MOUNTER, *Lynden, Watcom County, Washington, died Nov. 27, 1966, at the home of a daughter in Forks, Washington. He was 88.*

Dr. Mounter was a 1909 graduate of the University of Michigan Medical School, Ann Arbor, Mich. He practiced in Lynden and Bellingham and was chief of staff at St. Luke's Hospital in Bellingham for many years. He retired in 1957. Cause of death was cardiac failure due to generalized arteriosclerosis.

Shadel Hospital

12001 Ambaum Boulevard, S.W.
Seattle, Washington 98146
CH 4-8100

The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

APPROVED BY THE AMERICAN MEDICAL ASSOCIATION

MEMBER OF THE AMERICAN HOSPITAL ASSOCIATION

Preludin®
phenmetrazine
hydrochloride

helps keep calories at arm's length

In one double-blind program* involving diet, close doctor/patient cooperation, exercise, posture instruction, and follow-up visits, 93 obese patients received Preludin or a placebo. The drug and placebo were alternated every four weeks. This procedure lasted from 8 to 35 weeks.

Sixty-one percent of the patients lost more weight on Preludin than on placebo. In fact, they lost an average 1.9 pounds per week—almost four times as much as when they were on placebo!

For a decade Preludin has demonstrated similar results. Its effectiveness has been described in more than 300 published clinical reports involving more than 10,000 patients.

Preludin curbs appetite without excessive stimulation. It will work in your weight-control programs too.

*Barnes, R. H.: J.A.M.A. 166:898, 1958.

Preludin® tablets of 25 mg.
Endurets® prolonged-action tablets of 75 mg.
Dosage: One 25 mg. tablet two or three times daily, or one 75 mg. Endurets tablet once daily.
Contraindications: Severe coronary artery disease, hyperthyroidism, severe hypertension, nervous instability, and agitated prepsychotic states. Do not use with other CNS stimulants, including MAO inhibitors.
Warning: Do not use during the first trimester of pregnancy unless potential benefits outweigh possible risks.
Precautions: Use with caution in *moderate* hypertension and cardiac decompensation. Excessive use may result in a psychotic illness manifested by restlessness, mood or behavior changes, hallucinations, or delusions.
Side Effects: Dryness or unpleasant taste in the mouth, urticaria, and (rarely) overstimulation, insomnia, dizziness, nausea, or headache.

For details, see full Prescribing Information. 6544-III (B)

Under license from Boehringer Ingelheim G.m.b.H.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, N.Y.

IDAHO

Idaho State Medical Association—**360 SONNA BUILDING, Boise, Idaho 83702**

PRESIDENT *A. Curtis Jones, Jr., M.D., Boise*
SECRETARY *William R. Tregoning, M.D., Boise*
EXECUTIVE SECRETARY *Mr. Armand L. Bird, Boise*
Annual meeting, June 28-July 1, 1967, Sun Valley

THE DIAMOND ANNIVERSARY

75th Annual Meeting
Idaho State Medical Association

Sun Valley

June 28 -- July 2, 1967

Guest Speaker: Milford Rouse, President-Elect American Medical Association

Personals

Alfred M. Stone, Boise, will succeed Alfred M. Popma, as director of St. Luke's Hospital Department of Radiology. Dr. Popma resigned to direct a regional study of medical education for WICHE.

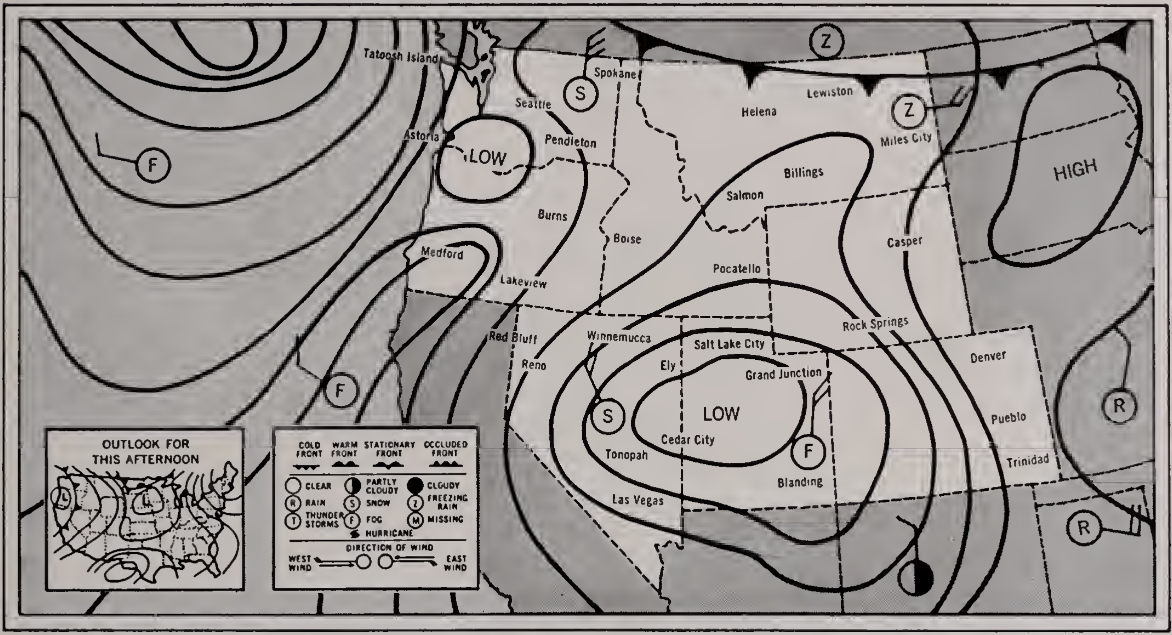
Ralph R. Jones is new President of the medical staff of St. Luke's Hospital, Boise. President-elect is C. C. Johnson, and department chairmen are Walter W. Hair, medicine; Robert G. Paterson, surgery; Max D. Gudmundsen, Obstetrics and Gynecology; George E. Weick, Pediatrics; and John W. Swartley, general practice. All are from Boise.

New officers of the Nampa Mercy Hospital Staff are Robert A. Blome, president; Samuel C. Taylor, vice chairman, Robert K. Borron, secretary, and F. D. Koehne, treasurer.

continued on page 297

REGIONAL WEATHER FORECAST

Dust Storms, High Winds, Snow Storms and Colder Followed by Cough, Stuffed and Runny Noses and Aches and Pains.



Tussagesic breaks up coughs, quickly clears stuffed and runny noses and relieves aches and pains. Provide coverage of the tough cold for up to 24 hours with just a single timed-release tablet dosed morning, midafternoon and at bedtime.

each

Tussagesic®

timed-release tablet contains:

Triaminic® (phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. *Side effects:* Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. *Precautions:* The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES · *a division of The Wander Company* · **LINCOLN, NEBRASKA**

Against these three major pathogens…

Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemolytic Streptococci

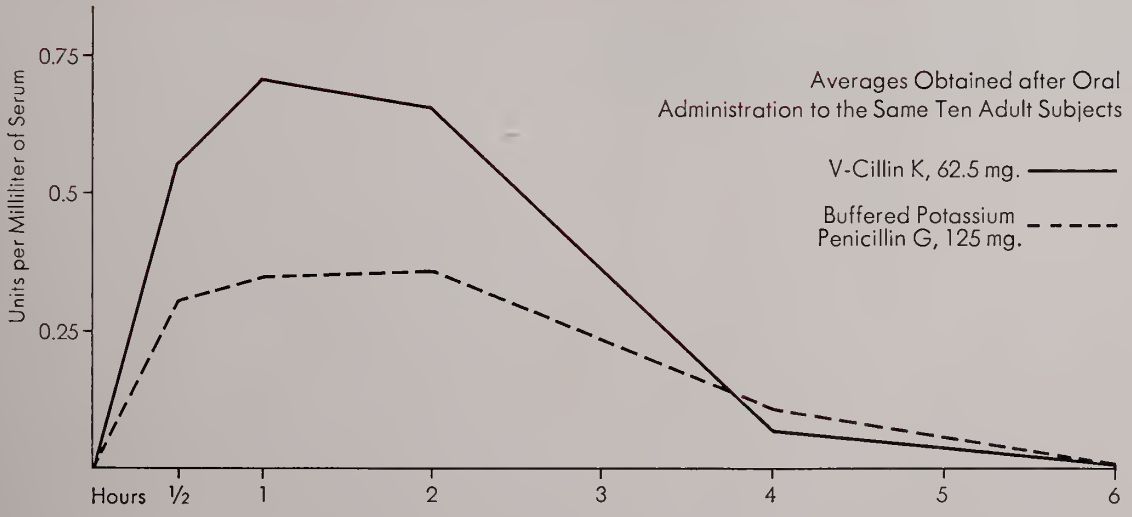
V-Cillin K® provides unexcelled oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269 1019, 1963.

with high blood levels, even in the presence of food



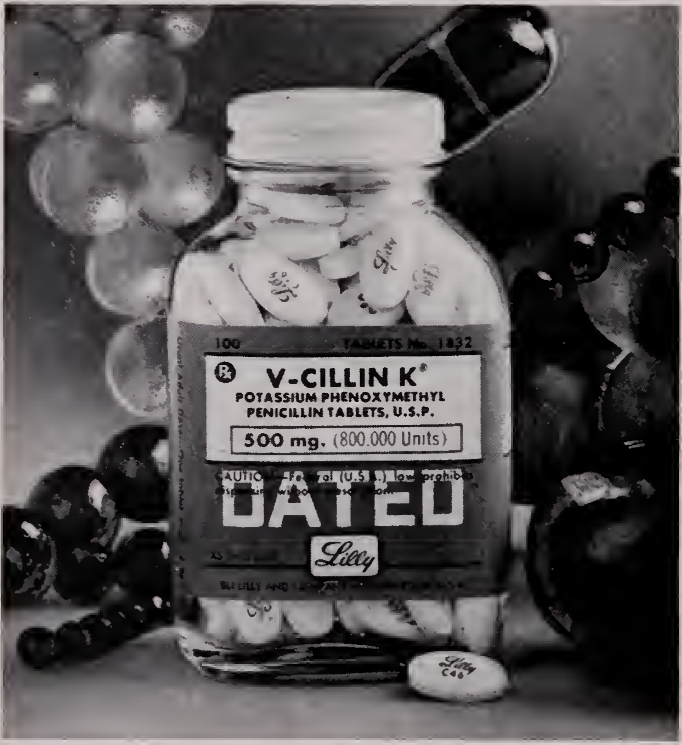
Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K® Lilly 700157

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy. Reactions occur more frequently in individuals with bronchial asthma or other allergies or in those who have previously demonstrated sensitivity to penicillin. If hypersensitivity reactions occur, the drug should be discontinued.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, skin rash, symptoms resembling those of serum sickness, or other manifestations of penicillin allergy may occur. When penicillin is administered, measures for treating anaphylaxis should be readily available. Those include epinephrine, oxygen, and pressor drugs for relief of immediate allergic manifestations as well as antihistamines and corticosteroids for delayed effects.

The use of antimicrobial agents may be associated with the overgrowth of antibiotic-resistant organisms; in such a case, antibiotic administration should be stopped and appropriate measures taken.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every six hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; 250 mg. (400,000 units), and 500 mg. (800,000 units) in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

70015

continued from page 292

Societies Elect 1967 Officers

Bonner-Boundary Medical Society

President: Wilber C. Hayden, Sandpoint
Secretary-Treasurer: Fred E. Marienau, Sandpoint

———

Kootenai-Benewah Medical Society

President: Wilbur H. Lyon, Coeur d'Alene
President-Elect: Conlyn J. Cederblom, Coeur d'Alene
Secretary-Treasurer: Jane D. Gumprecht, Coeur d'Alene (Re-elected)
Delegates: E. R. W. Fox and William T. Wood, Coeur d'Alene

———

North Idaho District Medical Society

President: Donald J. Soltman, Grangeville
Vice-President: Burton R. Stein, Lewiston
Secretary-Treasurer: Eugene M. Baldeck, Lewiston
Delegates: Roland D. Brooks and Donald E. Adams, Moscow; O. V. Baumann, Robert C. Colburn, Carl T. Koenen, William C. Mannschreck, Raymond M. Stover, all of Lewiston.

———

South Central District Medical Society

President: Charles R. McWilliams, Twin Falls
President-Elect: Bernard A. Bodmer, Gooding
Secretary-Treasurer: H. Thad Scholes, Twin Falls
Delegates: William A. Kendall, Twin Falls; Charles W. Cullings, Buhl; Eugene H. Holsinger, Burley; James E. Sloat and L. M. Neher, Jerome; Roy O. Shaub, Twin Falls; Thurman A. Hunt, Rupert, and Harold F. Holsinger, Wendell.
Alternate Delegates: Elvin J. Cutler, Burley; Harry F. Brumbach, Glenn A. Hoss, and Clarence F. Wurster, Twin Falls; Maurice E. Scheel, Wendell; Reuben C. Matson, Jerome; Royal G. Neher, Shoshone; Ben K. Humphrey and Otto A. Moellmer, Rupert

———

Southeastern District Medical Society

President: Richard K. Gorton, Pocatello
President-Elect: John R. McMahon, Pocatello
Secretary-Treasurer: David C. Miller, Pocatello (Re-elected)
Delegates: Clark T. Parker, Calvin Buhler, E. Burton Webb, Louis N. Diana, and H. Kent Staheli, Pocatello; Ralph G. Goates, Blackfoot
Alternate Delegates: Merrill J. Sharp, Richard G. Crandall, David C. Miller, John R. McMahon, Pocatello; Frank L. Harms, American Falls.

New Committee Formed

A Medical Education Committee has been added to the roster of the Idaho State Medical Association. The new committee will be responsible for reviewing all programs and proposals that concern medical education in Idaho. Members are Robert E. Staley, Kellogg; William P. Marineau, Moscow; Miles E. Thomas, Boise; Robert E. Hay, Nampa; Paul B. Heauston and George E. Brown, Jr., Twin Falls; E. V. Simison, Pocatello; and Dauchy Migel, Idaho Falls.

State Board of Medicine Section

Twelve physicians, who had been granted temporary licenses, received permanent licensure at the January 9-11 meeting of the Idaho State Board of Medicine in Boise. They are William H. Westergard, Bert T. Reed, Harlan T. Thoreson, G. Royden Streib, and Noah W. Klein, all of Boise; John W. Luttrull, Nampa; John D. Johnson, Twin Falls; Harold E. Dittemore, Sandpoint; Richard D. Thorson, Lewiston; Ivyl W. Wells, Mountain Home; Donald L. Bricker and Eugenio Font, of the Mount Home AFB.

Nine physicians were granted licensure Without Written Examination on the basis of endorsement from states maintaining standards comparable to Idaho. They are Jack R. Daniels, Carmel, Calif., Pathology; Rodger G. Hawkins, Fresno, Calif., General Practice; Paul K. Jentes, Columbus, Ohio, Student Health Service; Robert F. Malison, Portland, Ore., Pathology; Richard F. McClure, Palos Verdes Estates, Calif., Radiology; Donald J. Murphy, Billings, Mont., Anesthesiology; Roland A. Steele, Lewiston, General Practice; Wilfred E. Watkins, Bellwood, Illinois, Urology; Robert H. Young, Jr., Wood, Wis., Urology.

One physician passed the Idaho Written Examination. He is Donald K. Panke, Kellogg, General Practice.

The Board met with the Physical Therapy Advisory Committee to consider an application for registration. Granted registration Without Examination on the basis of endorsement was Mrs. Lovell Yaeger Dorchak, R.P.T., Boise.

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*Marks, V., and Dawson, A.: Brit. M. J. *1*:293, 1965.

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REVIEWS

Books reviewed in the columns of Northwest Medicine may be borrowed by any subscriber. Write Miss Ruth Harlamert, Librarian, King County Medical Society Library, Room 105, Cobb Bldg., Seattle, Wn. 98101. The library appreciates, but does not demand, reimbursement for postage.

High-altitude diseases—mechanism and management

By Carlos Monge M., M.D., and Carlos Monge C., M.D., 97 pp. $5.75. Charles C Thomas, Springfield, Ill., 1966.

It would have been extremely difficult to find someone with more longevity in the field of high-altitude problems than C. Monge, Sr., since his first article appeared almost 40 years ago. He is now joined by C. Monge, Jr., in an evaluation of the medical problems of indigenous humans and animals in high mountainous terrain.

This book is directed almost exclusively toward considerations of the native resident of high-altitude with little information on the sea-level resident acutely exposed to altitude, as in mountaineering situations.

There are brief, but interesting chapters on high-altitude animal pathology and some 16th century historical aspects. Although interesting, I found the chapter on Anesthesia and Surgery at High-Altitude to be of insufficient depth to be of much practical value.

This book will find more interest among physiologists than among most clinicians. With emphasis toward the physiological chemical aspects of high-altitude disease and acclimatization, this monograph becomes a valuable newest addition to the American Lecture Series in Living Chemistry.

GENE W. MASON, M.D.

The mayo legacy

By Gunther W. Nagel, M.D., emeritus clinical professor of surgery, Stanford University School of Medicine, Palo Alto, Calif., Springfield, Ill., Charles C Thomas, $6.

I remember Dr. Nagel at the Mayo Clinic, when I was a fellow and he a first assistant. He writes easily, and recalls to my mind many people and incidents that I read with delight.

Today it is hard to realize what an impact the Mayo Clinic had in the 20's and 30's. For example, in 1926, Balfour reported 128 ten-year survivals after gastric resection for cancer of the stomach. They had explored about 50 per cent of all cancers of the stomach seen, and of these had resected 22.6 per cent, a total of 278 resections. By 1934 they had reduced their operative mortality in resection for stomach cancer to under 5 per cent, about one-third of the usual rate at that time. By contrast, across the state line at the state university hospital not a single case of gastric cancer was operated upon as it was considered a hopeless condition.

The Mayos did this by personally visiting all progressive clinics in America and Europe, but they brought back to the Clinic just what their own personal evaluation dictated. Every general surgeon had his field of special interest. But he did much more than that, and the other surgeons operated in his field too. I wonder what "J.W." would have thought of the present trend sometimes starting to specialize in medical school. They also trained hundreds of young doctors, many of whom did their first research there.

This is the Mayo Clinic Legacy. I enjoyed it and I think you will too.

DAVID METHENY, M.D.

X-Ray of Month on Page 260

There is marked destruction of the floor and the dorsum of the sella turcica. This causes one to consider pituitary neoplasm or craniopharyngioma. However, in this case there is also destruction of one of the anterior clinoid processes (which explains the optic atrophy), unusual in these diseases. Also, more obvious, is the typical Luckenschadel or pressure effect on the cranial bones, as well as marked spearation and widening of the cranial sutures, consistent with generalized increased intracranial pressure. Therefore, a disease-producing obstructive hydrocephalus is most likely. In these cases, generalized ventricular dilation results in destruction of the sella by the pulsations of the enlarged anterior recesses of the third ventricle. This was proven in this case by ventriculography. The cause was a cerebrellar astrocytoma, producing complete obstruction of the aqueduct and slyvius.

Films made two years following successful surgical excision of the neoplasm demonstrate normal cranial sutures and complete regeneration of the sella, including the anterior clinoid processes and the dorsum. This is the typical radiographic end result after successful treatment of the increased intracranial pressure.

GENERAL NEWS

Course in Medical and Science Writing

Three days of seminars on the writing of medical and other scientific manuscripts will be held May 12-14 at Big Sur, California, under the joint sponsorship of the Esalen Institute and the Northern California Chapter of the American Medical Writers' Association.

The program will alternate between lectures and workshops. W. D. Snively, Jr., M.D., a former president of AMWA, will teach a course in Sentence and Paragraph Structure. In one of the workshop sessions, which will be under the direction of Paula Harris, president of the Northern California AMWA, and Harley Messinger, M.D., a past president, participants will be required to write an abstract of an assigned article, and the abstracts will then be criticized.

Another workshop will deal with Intensive Editorial Review of a Manuscript, and a third will take up Approaches to the Subject.

Membership in the sponsoring organizations is not necessary for enrollment.

The $60 fee for the course includes room and meals.

For registration or further information, contact: Harley Messinger, M.D., Ph.D., 3029 Benvenue, Berkeley, California 94705.

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MEDICAL CENTER IN WESTERN WASH.—Has an opening for an internist and a dermatologist in a medical specialty group. City expanding rapidly with big industry and future outlook very promising. Climate and recreational facilities are excellent. Write Box 15-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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IMMEDIATE OPENING—Physician for Student Health Service needed immediately, because of increasing enrollment, at Oregon State University, Corvallis. Age limit 60, Oregon license required, academic appointment with tenure and other fringe benefits including retirement and insurance. Salary open. Write Charles E. Kremer, M.D., Director, Oregon State Univ., Corvallis, Oregon. 97331

BRITISH COLUMBIA GENERAL PRACTICE—District of 10,000 people in Central B. C. Fast growing agricultural, timber and mining economy, attracting many Americans, has excellent opportunity for physicians. Group or private practice. Two new hospitals under construction. This is "Outdoorland," one hour drive from Prince George. Further information from Omineca Hospital Society, Vanderhoof, B.C.

LOCUM TENENS—For 2 weeks in July for rural practice sought by G. J. Timmer, M.D., Goldendale, Wash. 98620.

GP LOCUM TENENS—For 3 months, $2,000 per month. Write Box 25-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

GP PRACTICE AVAILABLE—Yachting community near Seattle. Complete new equipment for comprehensive medical care in modern 5-room suite in shopping center. Present physician accepting full time academic post. Receptionist will stay long enough to introduce. Income could be tripled with obstetrics and surgery. Terms, on the depreciated value of equipment on contract. Write Box 24-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121 or phone 206-297-3401 days, 206-297-3560 evenings.

SURGICAL PRECEPTORSHIPS—Open July 1, 1967, for one or two year appointments. American Board credit if three years residency completed. Oregon license required for 2nd year but not the 1st. If foreign graduate, ECFMG and permanent visa required. Salary $800 per month. N. W. Frink, M.D., Permanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

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OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

SITUATIONS WANTED

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OTOLARYNGOLOGIST—Board certified, service obligation complete, seeks association or group practice in larger community in Northwest. Write Box 23-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

HANDICAPPED PHYSICIAN wants practice opportunity. L. J. Bland, 5602 S. Muller, Tacoma. GR 4-1247.

INTERNIST—With additional training in cardiology seeks position in Seattle area, July 67. Write Box 28-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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Meetings OF MEDICAL SOCIETIES

AMA Annual—June 18-22; Atlantic City, 1967; San Francisco, 1968.

AMA Clinical—Houston, 1967; Miami Beach, 1968.

Idaho State Medical Association—June 28-July 1, 1967, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society—
Pres., Jack M. Docter, Seattle
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy
Pres., Wallace Lindahl, Seattle
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association—
Pres., Frank C. Henry, Seattle
Sec., L. H. Garland, San Francisco
Feb. 13-16, 1967, Sun Valley

Oregon Medical Association—Portland.

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

Washington State Medical Association—Sept. 10-13, 1967, Seattle

West Coast Allergy Society—
Pres., John S. O'Toole, Riverside
Sec., Roy L. Matteri, Portland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.).
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres. G. F. Starr, Eugene
Sec., K. D. McMilan, Eugene

Oregon Radiological Society—University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Raphael B. Durfee, Portland
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society—Quarterly Meetings, Congress Hotel, Portland
Pres., Gerald Whitlock, Portland.
Sec., Emerson J. Collier, Portland.

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland.
Sec., David Sellers, Portland

Portland Academy of Pediatrics—1st Monday
Pres., George Nash, Portland
Sec., R. J. Meechan, Portland.

Portland Academy of Psychiatry — Fourth Tuesday except. Dec., Jun., Jul., Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May).
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland.

UOMS Alumni Association
Annual Meeting, April 5-7, 1967
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract.—4th Mon., exc. June, July, Aug., Dec.
Pres., Donald McLaughlin, Seattle
Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto.—3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Frederick F. Ackerman, Seattle
Sec., D. F. Milam, Jr., Bellevue

Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Glen E. Hayden, Seattle
Sec., Harry A. Kettering, Mercer Island

Seattle Pediatric Society—3rd Friday (Sept.-May), Arctic Club
Pres., Charles Kaplan, Seattle
Sec., Richard Dion, Seattle

Seattle Surg. Soc.—4th Mon. (Sept.-June) annual meeting
Pres., Frank C. Henry, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn, Annual—March 4, 1967
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society — Quarterly
Pres., Charles R. Cavanaugh, Jr., Spokane

Tacoma Academy of Internal Medicine —4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle.
Sec., John E. Nelson, Seattle

Washington Academy of General Practice, Scientific Session, May 25-27, 1967, Seattle
Pres., Charles C. Strong, Vancouver
Sec., Wm. A. Ehlers, Lacey

Washington State Radiological Society —Seattle, Quarterly
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists
Pres., Richard J. Ward, Seattle
Sec., Philip Bridenbaugh, Spokane

Wash. St. Soc. of Allergy.
Pres., Paul Van Arsdel. Jr., Seattle.
Sec., S. H. Tarica, Seattle.

Yakima Surgical Society—Last Thursday (Sept.-May)
Pres., Frank LeCocq, Yakima
Sec., John Harrington, Yakima

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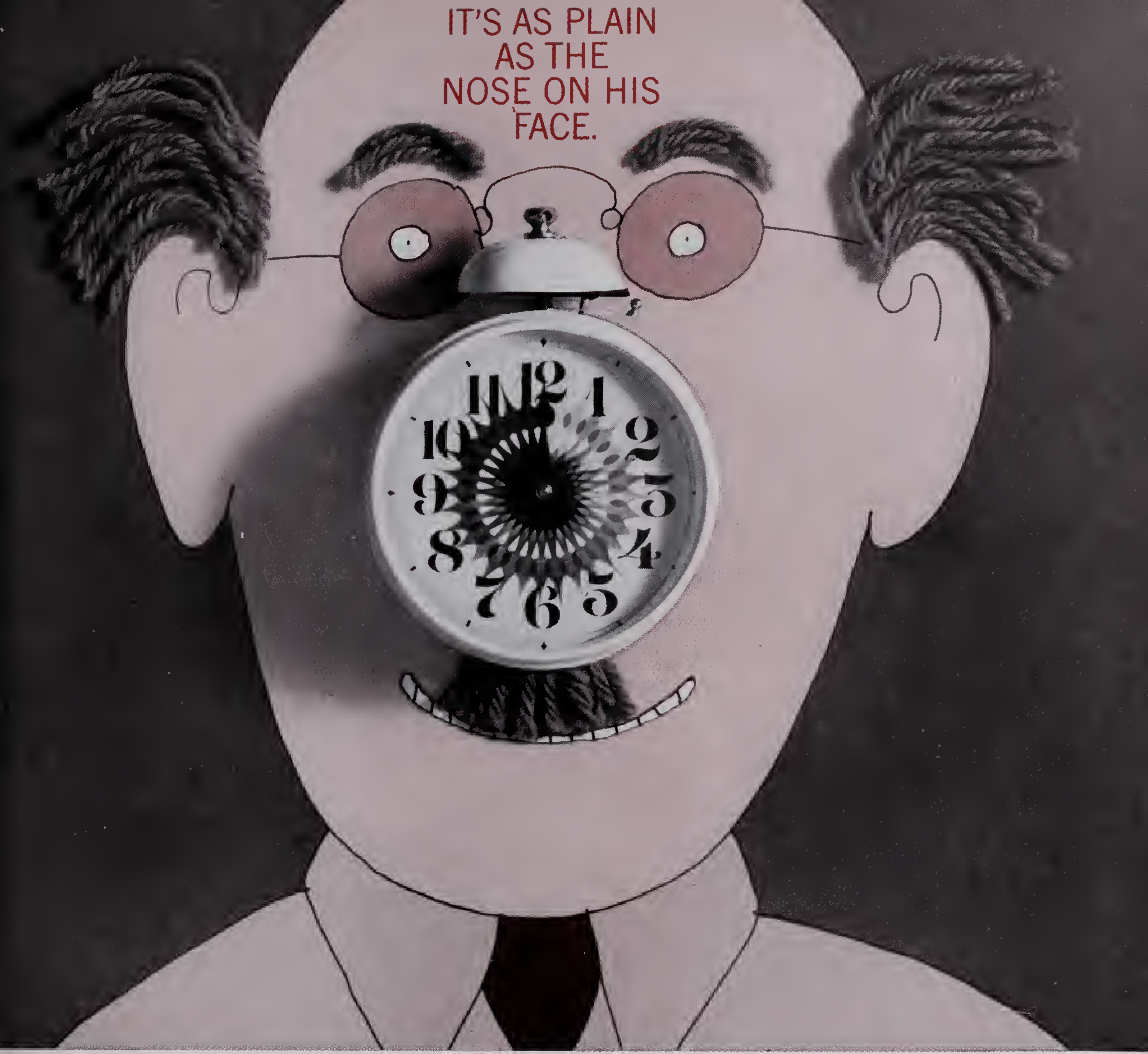

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*Schiller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

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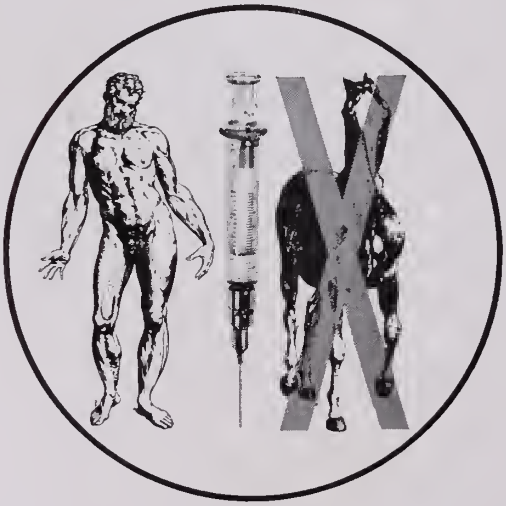

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Future role of
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Society . . .
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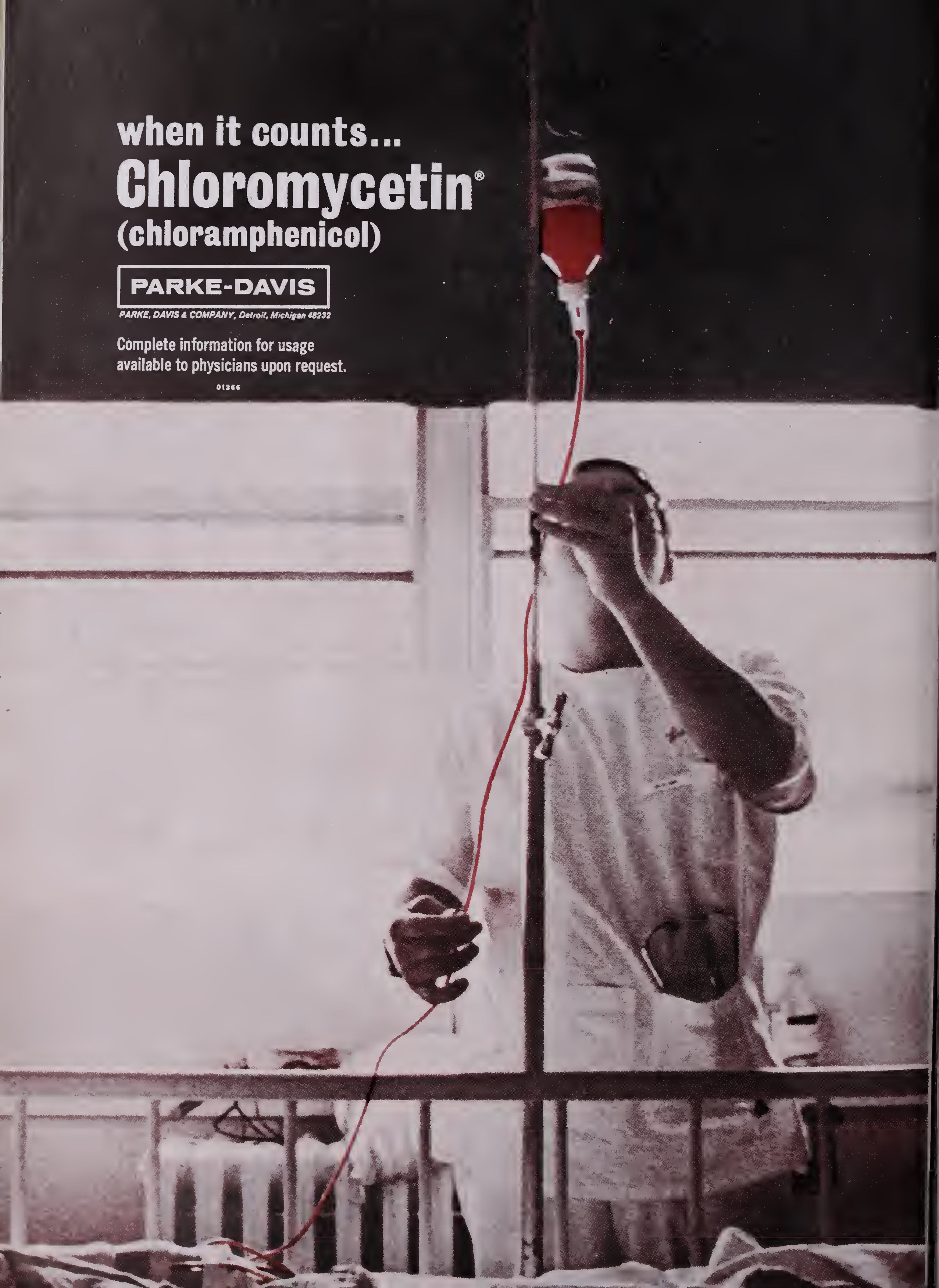

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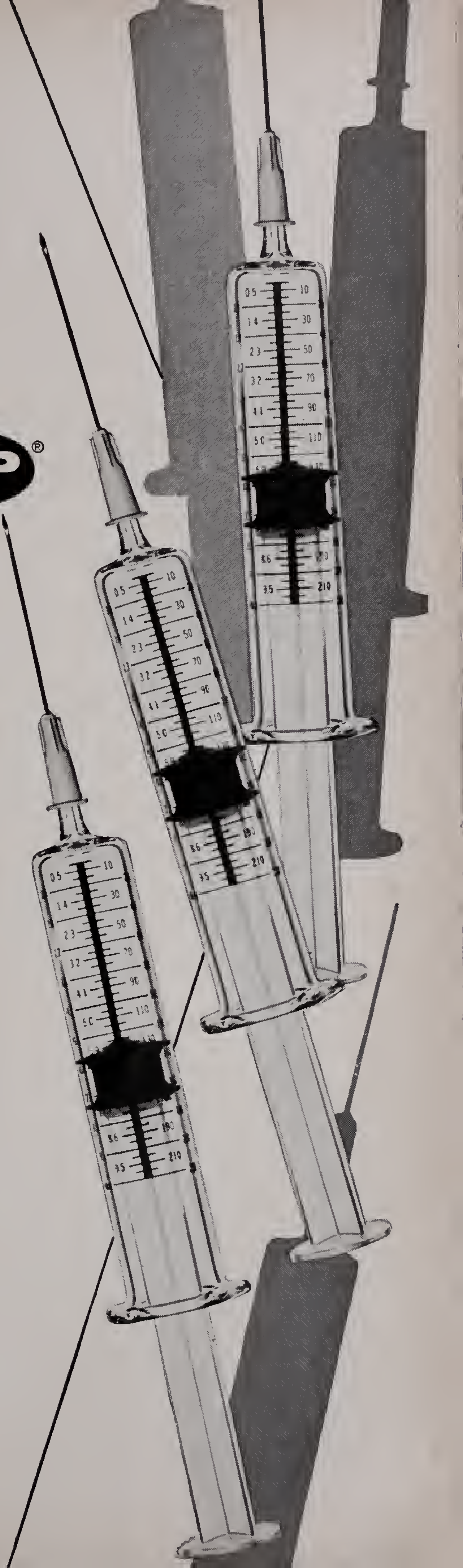

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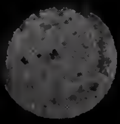
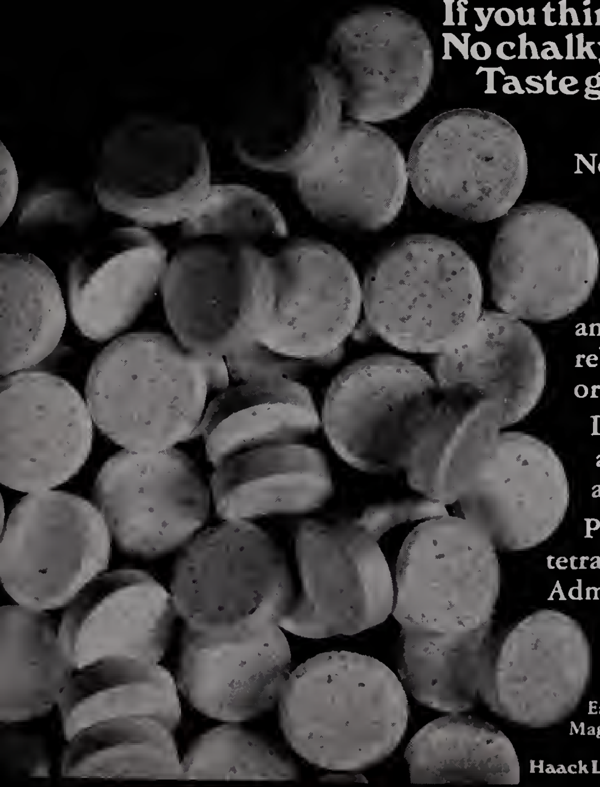


One Neosorb® Plus Tablet will neutralize one-half glass (4 oz.) of 0.1*N* HCl. That's a lot of antacid relief.



If you think that's good, wait until you chew one. No chalky aftertaste. Spearmint flavored. Taste good day after day, week after week.

Neosorb Plus Tablets are chewable with no chalky aftertaste, and have a delicate spearmint flavor for excellent patient acceptance, week after week.

For your patients with gastric hyperacidity or ulcer syndrome, give Neosorb Plus Tablets with the fast, protective and long-lasting antacid action. They do not cause acid rebound or electrolyte imbalance and are free of constipating or laxative effects.

Dosage: The usual dose is 1 or 2 tablets one to two hours after meals and at bedtime. Tablets should be chewed or allowed to dissolve slowly in the mouth.

Precautions: Do not administer to patients receiving oral tetracycline since magnesium reduces tetracycline absorption. Administer cautiously in cases of severe renal impairment.

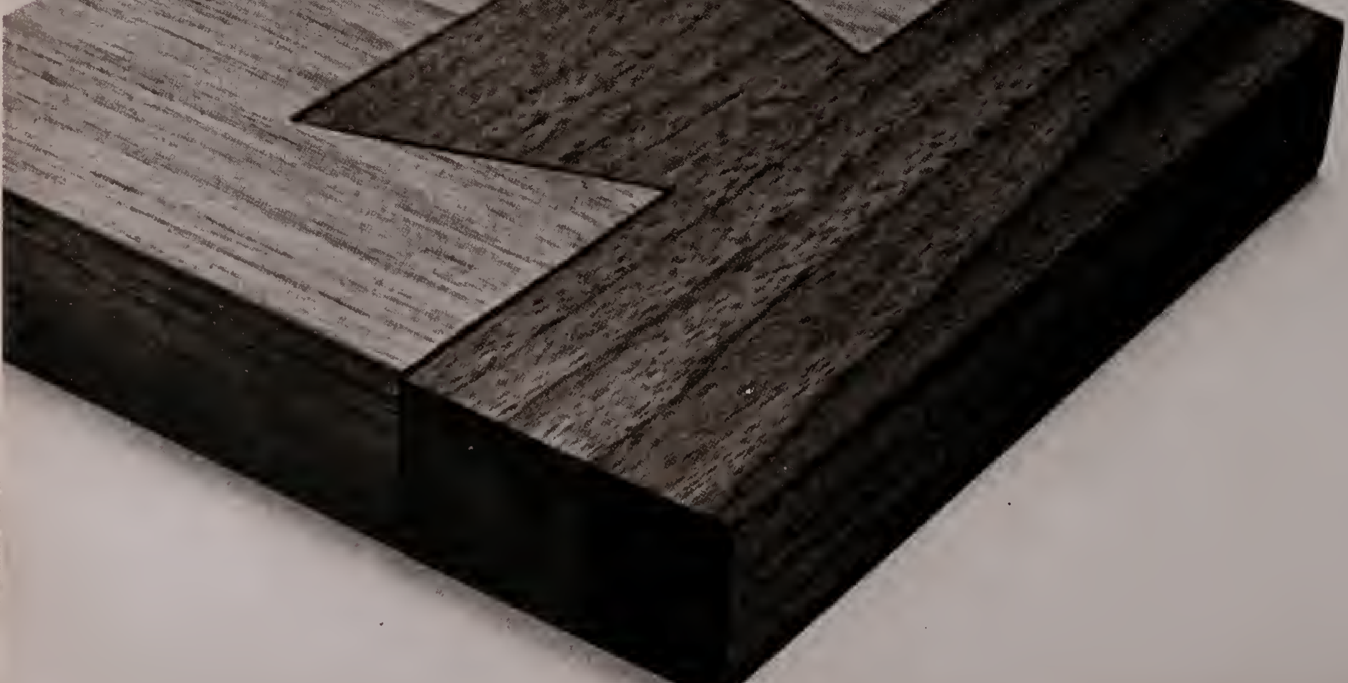
Supplied: Bottles of 100 tablets.

Neosorb® Plus Chewable Antacid Tablets

Each green and white tablet contains: Dried aluminum hydroxide gel 300 mg. Magnesium hydroxide 150 mg./Magnesium trisilicate 150 mg./Spearmint flavored.

Haack Laboratories, Inc. Division of Lemmon Pharmacal Company, Portland, Oregon 97208

even better together
in mild hypertension
Serpasil®-Esidrix®
(reserpine and hydrochlorothiazide CIBA)
Combination Tablets



Serpasil-Esidrix combines reserpine (the original, and most widely used, rauwolfia alkaloid developed by CIBA) with hydrochlorothiazide (the most widely used oral diuretic, also a product of CIBA research).

even better blood pressure reduction—because 2 antihypertensive agents of choice often work better together

One drug potentiates the antihypertensive action of the other. Blood pressure is generally controlled with relatively low dosages of each component, often resulting in minimized side effects.

Although each component alone may provide adequate therapy in many cases of mild hypertension, the combination offers advantages which cannot be achieved with single-drug therapy.

even more patient benefits—because complementary actions of 2 antihypertensive agents extend the range of advantages

Reserpine, in addition to lowering blood pressure, provides central calming action to help relieve anxiety and tension; provides bradycrotic action to slow the rapid heart.

Hydrochlorothiazide, in addition to lowering blood pressure, relieves edema; permits relaxation of salt restriction.

The combination provides medication in one tablet instead of two; one prescription instead of two—encourages patient adherence to the regimen, offers economy.

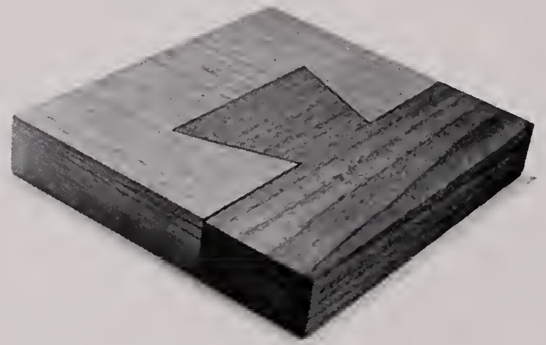
for your next patient with mild hypertension

Rx Serpasil-Esidrix

Combination Tablets

Please see following page for prescribing information.

Serpasil®-Esidrix®
(reserpine and hydrochlorothiazide CIBA)
Combination Tablets



INDICATIONS: Mild to moderate hypertension, especially when complicated by anxiety, tachycardia, or edema.

SIDE EFFECTS AND PRECAUTIONARY MEASURES

Serpasil® (reserpine CIBA)
Occasional side effects: lassitude, drowsiness, nasal congestion, looseness of stools, increased frequency of defecation. Rare side effects: anorexia, headache, bizarre dreams, nausea, dizziness, skin rash.

Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg daily. When the drug is discontinued, depression usually disappears, but hospitalization and shock therapy are sometimes required.

Caution: Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to prevent or reverse hypotension and/or bradycardia.

Because reserpine may increase gastric secretion of hydrochloric acid, use cautiously in patients with peptic ulcer.

Use cautiously with digitalis, quinidine, or guanethidine. Not recommended for aortic insufficiency.

Esidrix® (hydrochlorothiazide CIBA)
Contraindictions: Oliguria, renal shutdown, progressive hepatic disease, and allergy to thiazides.

Warnings: Stenosis, hemorrhage, and ulceration of the small bowel have occurred with coated potassium tablets. Discontinue such medication when used with Esidrix if gastrointestinal disturbances arise.

Pay special attention to electrolyte balance of patients with severe renal or hepatic insufficiency. In patients with cirrhosis and ascites, watch for symptoms of impending hepatic coma. Thiazides may decrease glucose tolerance; use cautiously in diabetics. Hyperuricemia may occur but is readily reversed by a uricosuric agent. Lowering of blood pressure may sometimes result in nitrogen retention, particularly in patients with impaired renal function. Dosage titration is necessary in such patients.

Precautions: Watch for signs of fluid or electrolyte imbalance. Further electrolyte depletion may cause hypochloremic alkalosis and hypokalemia. Since the latter may precipitate digitalis intoxication, watch carefully patients who are taking digitalis or its glycosides or those with cardiac arrhythmias. In severe hypokalemia, large oral or intravenous doses of potassium may be required.

A few infants born of mothers who received thiazides during pregnancy have shown bone marrow depression with thrombocytopenia. Hydrochlorothiazide decreases responsiveness to exogenous norepinephrine and increases responsiveness to tubocurarine. Hypotensive episodes under anesthesia have been observed in some patients receiving thiazides.

Side Effects: In addition to those above, nausea, anorexia, headache, restlessness, constipation, dizziness, paresthesias, fatigue, increased sweating, cramps in arms and legs, diarrhea, abdominal pain. Rare reactions: purpura with or without thrombocytopenia, skin rash, photosensitivity, urticaria. Sometimes associated with hydrochlorothiazide: leukopenia, agranulocytosis, aplastic anemia, pancreatitis, jaundice, necrotizing vasculitis.

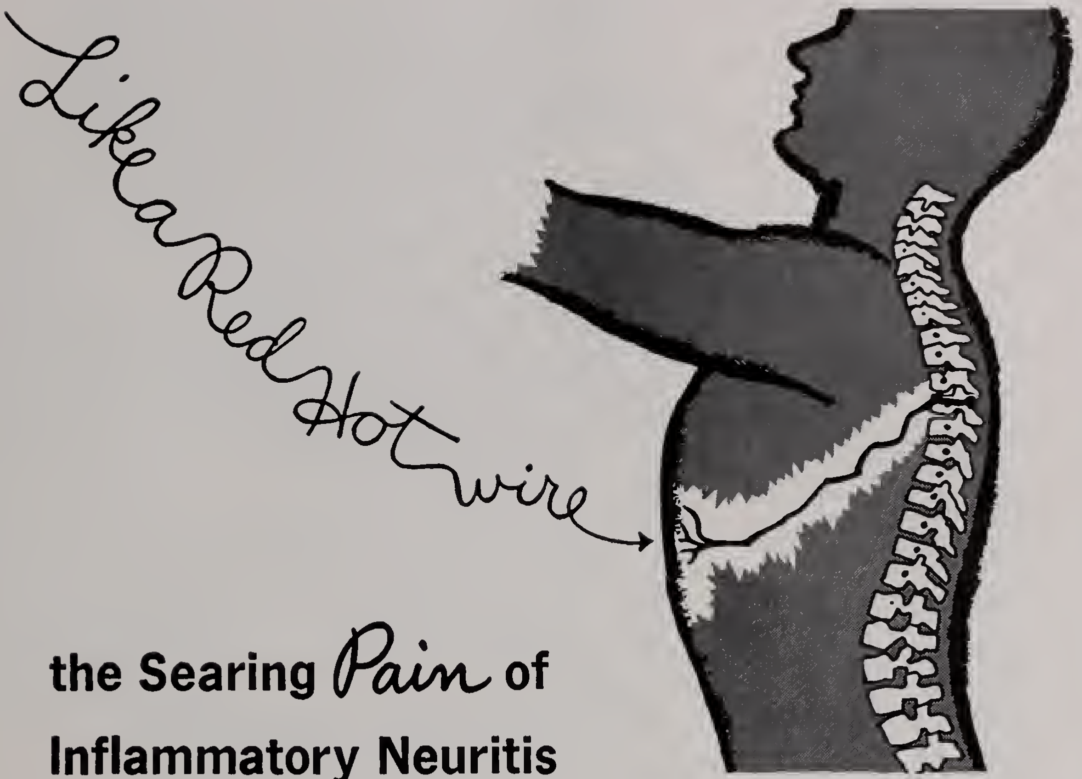
DOSAGE
Average dosage is 2 *Tablets #2* daily. For patients requiring less hydrochlorothiazide, substitute *Tablets #1*. For maintenance, reduce dosage to lowest effective level. When necessary, more potent antihypertensive agents may be added gradually in reduced dosages.

SUPPLIED
Tablets #2 (light orange), each containing 0.1 mg reserpine and 50 mg hydrochlorothiazide; bottles of 100 and 1000. *Tablets #1* (light orange), each containing 0.1 mg reserpine and 25 mg hydrochlorothiazide; bottles of 100 and 1000.

Consult complete literature before prescribing.

CIBA Pharmaceutical Company, Summit, N. J. **CIBA**

2/3595


Like a Red Hot wire

the Searing *Pain* of Inflammatory Neuritis

PROTAMIDE®

colloidal solution
of denatured
proteolytic enzyme

provides the *selective* fast-acting relief . . .

Repeatedly in published clinical studies,[1-10] investigators stress the following therapeutic characteristics:

- relief of inflammatory pain (non-traumatic) is prompt—particularly when administered early.[1-4]
- disability time is shortened from weeks to days.[7]
- so specifically effective is Protamide that a positive response is diagnostic of inflammatory neuritis.[3,4]
- prompt relief is observed even in ophthalmic herpes zoster.[5,6]
- incidence of sequelae such as postherpetic neuralgia is reduced.[1-4]
- consistently described as the therapy of choice.[1,3-6]

Administration:
In neuritis and herpes zoster, one ampul I.M. daily for 2 to 5 days usually relieves pain completely in patients treated early. Well tolerated.[1-10] However, inadvertent intravenous administration may cause anaphylactoid reaction.

—Boxes of 10 ampuls, 1.3 cc. each.—

References: (1) Baker, A. G.: Penn. Med. J. *63*:697-698 (May) 1960. (2) Smith, R. T.: New York Med. *8*:16-19 (Aug. 20) 1952. (3) Smith, R. T.: Med. Clin. N. America (March) 1957. (4) Lehrer, H. W.; Lehrer, H. G., and Lehrer, D. R.: Northw. Med. *54*:1249-1252 (Nov.) 1955. (5) Sforzolini, G. S.: Arch Ophthal. *62*-381-385 (Sept.) 1959. (6) Shupala, E.: W. Virginia Med. J. *56*:191-193 (June) 1960. (7) Xander, G. W.: Western Med. *1*:14-17 (Sept.) 1960. (8) Combs, F. C., and Canizares, O.: New York J. Med. (Mar. 15) 1952, pp. 706-708. (9) Marsh, W. C.: U.S. Armed Forces Med. J. *1*:1045 (Sept.) 1950. (10) Love, T. R.: Rocky Mountain Med. J. *50*:873 (Nov.) 1953.

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B and C vitamins are therapy: Therapeutic amounts of B and C in stress formula vitamins often are vital during periods of physiologic stress. STRESSCAPS capsules, designed to meet increased metabolic demands, aid in achieving a more comfortable convalescence, a more rapid recovery. After surgery, as in many stress conditions, STRESSCAPS vitamins are therapy.

Stresscaps®

Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle

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A Building Block approach to treating hypertension

ABBOTT

With these three therapeutic building blocks you can create a once-a-day regimen to fit almost any degree of hypertension. See the following pages for details . . .

Consider starting your hypertensives on this basic thiazide

ABBOTT

Enduron eliminates sodium around the clock, yet is relatively sparing of potassium

Enduron is a true 24-hour single-dose thiazide. Its sodium excretion is not squeezed into an abrupt peak during the first several hours. It is well-sustained in a plateau-like effect — with little reduction in intensity during the first 12 hours, and decline thereafter only gradual.

Potassium loss, in contrast, reaches an early minor peak. Then it subsides rapidly. Moreover, doses larger than 5 mg. have little added effect on potassium. Thus doubling the dose from 5 to 10 mg. approximately doubles sodium excretion—yet increases potassium loss little or none.

Use Enduron once a day as an ideal starting therapy in mild hypertension. Use it, too, as a basic therapeutic building block with which other agents can be joined, for managing your more resistant hypertensives.

Once a day, every day

ENDURON®
METHYCLOTHIAZIDE

	Minimum	Usual	Intermediate	Maximum
DAILY DOSAGE RANGE	2.5 mg. tablet	5 mg. tablet	7.5 mg.	10 mg.

See Brief Summary on final page of advertisement.

To build added response, shift to Enduronyl

ABBOTT

The deserpidine component compares favorably to reserpine, but with reduced side effects

The rauwolfia component of Enduronyl is deserpidine (Harmonyl®), a purified crystalline alkaloid. It is comparable to reserpine in its antihypertensive and tranquilizing activity. Yet it produces less tendency toward typical rauwolfia side effects such as drowsiness, lethargy, stuffy nose, depression, etc.

Patient acceptance has been excellent.

Enduronyl comes in two strengths: regular and Forte. Both provide 5 mg. of Enduron. The variation is where most needed: in the deserpidine. These scored tablets give a surprisingly flexible choice of doses (see below).

Use Enduronyl for your patients within the broad range of mild to moderate hypertension. Dosage is *once* a day: this means Enduronyl will generally cost patients less than equivalent drugs taken two or three times daily.

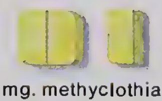
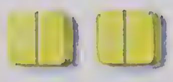
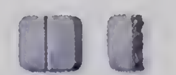
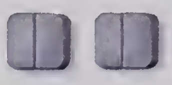
Once a day, every day

ENDURONYL®

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.25 MG.

ENDURONYL FORTE

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.5 MG.

	Minimum	Usual	Intermediate	Maximum
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.125 mg. deserpidine	 5 mg. methyclothiazide 0.25 mg. deserpidine	 7.5 mg. methyclothiazide 0.375 mg. deserpidine	 10 mg. methyclothiazide 0.5 mg. deserpidine
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.25 mg. deserpidine	 5 mg. methyclothiazide 0.5 mg. deserpidine	 7.5 mg. methyclothiazide 0.75 mg. deserpidine	 10 mg. methyclothiazide 1 mg. deserpidine

See Brief Summary on final page of advertisement.

704075

Eutonyl affords a different kind of basic therapy for moderate to severe cases

ABBOTT

Effect tied to reduced peripheral vascular resistance; no central depressant action

Eutonyl is a unique nonhydrazine agent. It is reported to act by reducing peripheral vascular resistance, with little or no effect upon cardiac output.[1,2]

In clinical trials, significant reductions in mean blood pressure were seen in 84% of patients studied — including some unusually difficult cases. Eutonyl lowers diastolic in proportion to systolic, and in half of the cases studied, reductions in the sitting and recumbent positions were nearly as great as in the standing position.

Most important: There is no central depressant action. In fact, many patients reported an *increased* sense of well being.

Here, then, is a highly effective *basic treatment* for moderate to severe cases—and one that will not hamper your patient with lethargy or drowsiness while on treatment.

Once a day, every day

EUTONYL®

PARGYLINE HYDROCHLORIDE

DAILY DOSAGE RANGE	Minimum	Usual starting	Intermediate	Maximum
	10 mg. tablet	25 mg. tablet	50 mg. tablet or as needed	200 mg.

---

1. Brest, A. N., et al., Cardiac and Renal Hemodynamic Response to Pargyline, Ann. N. Y. Acad. Sci., 107-1016, 1963.
2. Winsor, T., Pargyline Hydrochloride, Hypertension, Urinary Tryptamine, and Vascular Reflexes, Geriatrics, 19:598, Aug., 1964.

See Brief Summary on final page of advertisement.

Eutron adds thiazide for enhanced therapy with milder side effects

Only a 7/4 mm. span between standing and recumbent pressures—reduced chance of orthastatic hypotension

The combining of Eutonyl and Enduron in Eutron permits a significantly greater antihypertensive effect than with either agent used alone. This in turn may allow therapeutic success with lesser dosage—and correspondingly milder side effects.

Indeed, fully 94.5% of all patients studied during clinical trials continued on therapy uninterrupted by side effects.

Most striking was the drug's action in lowering blood pressure to *nearly equal levels in all body positions.* Total average spread between standing and recumbent readings (after treatment) was only 7/4 mm. Hg.

Thus, in your moderate to severe cases, Eutron affords a usually smooth course of therapy, with reduced likelihood of orthostatic effects. And, because of the thiazide component, Eutron may be used in the presence of congestive heart failure.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 MG.
WITH METHYCLOTHIAZIDE 5 MG.

	Minimum	Usual starting	Intermediate	Maximum
DAILY DOSAGE RANGE				
	12.5 mg. pargyline hydrochloride and 2.5 mg. methyclothiazide	25 mg. pargyline hydrochloride and 5 mg. methyclothiazide	37.5 mg. pargyline hydrochloride and 7.5 mg. methyclothiazide	50 mg. pargyline hydrochloride and 10 mg. methyclothiazide

See Brief Summary on final page of advertisement.

TM—Trademark

704075

ENDURON®
METHYCLOTHIAZIDE

ENDURONYL®
Each tablet contains Methyclothiazide 5 mg.
with Deserpidine 0.25 mg. or 0.5 mg.

Indications: Enduron is used to control edema and mild hypertension. Also used with other drugs for hypertension. Enduronyl is used in mild to moderately severe hypertension.

Contraindications: Neither Enduron nor Enduronyl should be used in severe renal disease (except nephrosis) or shutdown; in severe hepatic disease or impending hepatic coma; in patients sensitive to thiazides. Enduronyl is contraindicated in severe mental depression, active peptic ulcer, and ulcerative colitis.

Warnings: Consider possible sensitivity reactions in patients with a history of allergy or asthma. Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small bowel lesions; if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions and Adverse Reactions: Use thiazides with caution in severe renal dysfunction. Caution is also necessary with impaired hepatic function or progressive liver disease. During intensive or prolonged thiazide therapy, watch chloride and potassium levels (especially the latter if patient is on digitalis). In surgical patients, thiazides may alter response to vasopressors and tubocurarine. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborn). Occasional thiazide side effects also include blood dyscrasias; elevations of BUN, serum uric acid, or blood sugar; electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout.

Use Enduronyl with caution in patients with a history of peptic ulcer, as rauwolfias may increase gastric secretion. Discontinue at the first sign of mental depression. Rauwolfias may increase hypotensive effects of surgery or anesthesia, and are best discontinued two weeks prior. They also lower the convulsive threshold in epilepsy. Other possible rauwolfia side effects include drowsiness, nasal stuffiness, nausea, weight gain, and diarrhea. Less frequent complications of deserpidine therapy are aggravation of peptic ulcer, epistaxis, and skin eruption. Alcohol, barbiturates or narcotics may potentiate action of deserpidine.

EUTONYL®
PARGYLINE HYDROCHLORIDE

EUTRON™
Each tablet contains Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for use in patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone.

Contraindications: Pheochromocytoma, advanced renal disease, paranoid schizophrenia and hyperthyroidism. Until further experience is gained, not recommended for use in patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. Interval of two weeks should separate therapy and use of these agents.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When necessary to administer alcohol, narcotics (meperidine should be avoided), antihistamines, anesthetics, barbiturates, chloral hydrate and other hypnotics, sedatives, tranquilizers, or caffeine, these can be used cautiously at a dosage of ¼ to 1/5 the usual amount. Adjust dose of anesthetic agents to response of patient. Avoid parenteral administration where possible. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or other evidence of coronary disease should not increase physical activity. Pargyline may lower blood sugar. Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions; if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver dysfunction or progressive liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields, and fundi.

During intensive or prolonged methyclothiazide therapy, watch chloride and potassium levels (especially latter if patient is on digitalis). Methyclothiazide also may reduce arterial response to pressor amines. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism are possible in certain newborns). Thiazide drugs may increase responsiveness to tubocurarine.

Side Effects: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extra-pyramidal symptoms have been reported. Drug fever is extremely rare. Congestive heart failure has been reported in a few patients with reduced cardiac reserve.

Thiazide side effects also include blood dyscrasias, elevation of BUN, serum uric acid, or blood sugar, electrolyte imbalance, g.i. disturbances, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, pancreatitis, and gout. Nocturia has been observed with the combination.

704075

ABBOTT

CORRESPONDENCE

This department is a forum, provided for free individual expression. Letters are published as received and given little or no editing. Proof is submitted when time permits, before publication. Responsibility for statements rests with the authors of these communications and not with this journal which strives only to protect the right of individuals to speak for themselves. Ed.

Publication — Free Discussion — Criticism

EDITOR, NORTHWEST MEDICINE:

The excuse offered by Harvard's Director of Medical Information (Med. Trib. Letters, Mar. 20) for his premature and unethical ballyhoo of alleged findings by Harvard's Department of Nutrition will not hold water. The "findings" were on "Prevalence of Osteoporosis in High- and Low-Fluoride Areas of North Dakota" as published in the Journal of the AMA on October 31st last year.

The very existence of a "Director" whose function is to ballyhoo the alleged findings of a scientist or institution, effectively by-passing the normal processes of critical evaluation, denotes a planned program of unethical conduct; and the uncritical acceptance and publication of such hand-outs by "science writers" calls for a severe indictment of such writers as a class.

After the original Salk vaccine (which had to be hurriedly replaced because it killed people) had been introduced with similar ballyhoo, the AMA said:

> Whereas, There are traditional methods by which investigators and scientists in all fields announce and critically review discoveries and applications thereof: be it
>
> Resolved: That we reaffirm the need for presentation of reports on medical research before established scientific groups, allowing free discussion and criticism, and the publication of such reports, including methods employed and data acquired on which the results and conclusions are based, in recognized scientific publications.

If the "science writers" had had to rely on a reading of the published article for their information, instead of regurgitating spoon-fed pap, we can hope that they would not have arrived at identical conclusions and we can reasonably hope that some, at least, would have spotted at least *some* of the glaring faults and fallacies which brand the article as pseudoscience. *This* would have made news worth reading.

No scientific training is needed to recognize that the effects of fluorine-bearing waters cannot be determined by examining subjects who didn't use the waters; and this is only one of equally glaring defects in the study. The wonder is that any medical editor would publish such a "study," much less make it his lead article in the issue and write an enthusiastic editorial about what had been "found;" but, to cap it all, he has refused to publish such "free discussion and criticism" as would challenge even the grosser fallacies.

This can only be described as an unwholesome situation, especially if it denotes a similar suppression of free discussion and dissent in other matters, and I believe there is reason to think that it does.

F. B. EXNER, M.D.
Seattle, Washington (98101)

Readers are requested to observe the policy statement at the top of this page. We have faith in a free society, in which disagreement usually leads to progress.—Ed.

A Letter From Frenchy

EDITOR, NORTHWEST MEDICINE:

The section in the March 1967 issue of NORTHWEST MEDICINE, which dealt with the observance of the Centennial of medical education in Oregon included inside the back cover a formal expression of appreciation to NORTHWEST MEDICINE both for its part in this publication and for its continuing contribution to medical education since its begnning in 1903.

This letter is a personal thank you to the editor of NORTHWEST MEDICINE—yourself. There could be no publication of journals without editors, just as there can be no hospitals without physicians.

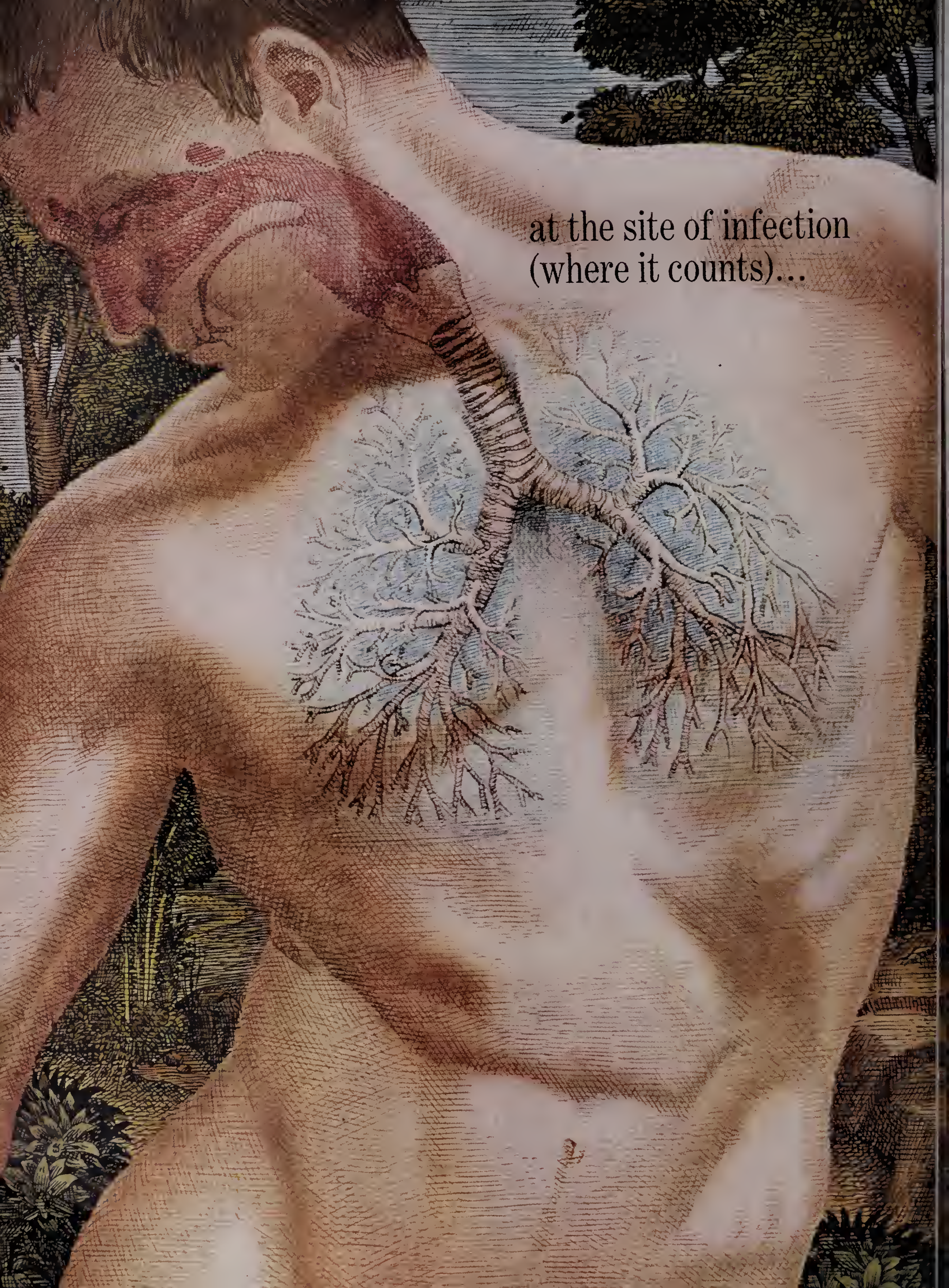
Through the medium of this letter, I wish our profession to know of the very important personal contribution you have made to the observance of the centennial of medical education in Oregon, not only through the pages of NORTHWEST MEDICINE but also for the important suggestions about details of composition, arrangement, etcetera. Without your enthusiastic cooperation and contribution of "know-how," this very attractive brochure would not have been a reality. This brochure is a testimonial to your editorship as well as to the medical profession in general.

The Committee on Oregon Medical History wishes to express its profound appreciation to you personally as editor of NORTHWEST MEDICINE.

Sincerely,
E. G. CHUINARD, M.D.
Chairman

P.S.: Knowing your reluctance to publish the above personal thank you, let me inform you that if you do not do so, it will cost me the price of a paid advertisement to get it printed in NORTHWEST MEDICINE!

EGC


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.
Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

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In peptic ulcer...

antacid therapy with a new benefit

CONTAINS A BALANCED
COMBINATION
OF THE MOST WIDELY
USED ANTACIDS—
FOR RAPID
NEUTRALIZATION.
PLUS SIMETHICONE—
TO CONTROL
THE FACTOR WHICH
ANTACIDS ALONE
CANNOT INFLUENCE.

Mylanta®

- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
- The nonfatiguing flavor and smooth, nongritty consistency of tablets and liquid encourage continued patient cooperation during long-term therapy.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

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Division of Atlas Chemical Industries, Inc.

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(norethindrone 1mg. c̄ mestranol 0.05mg

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tablets

ull prescribing information available from your pharmacist or Syntex representative.

norethindrone — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

Posed by professional model.

You can't set her free. But you can help her feel less anxious.

You know this woman.

She's anxious, tense, irritable. She's felt this way for months.

Beset by the seemingly insurmountable problems of raising a young family, and confined to the home most of the time, her symptoms reflect a sense of inadequacy and isolation. Your reassurance and guidance may have helped some, but not enough.

SERAX (oxazepam) cannot change her environment, of course. But it can help relieve anxiety, tension, agitation and irritability, thus strengthening her ability to cope with day-to-day problems. Eventually—as she regains confidence and composure—your counsel may be all the support she needs.

> Indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression.
>
> May be used in a broad range of patients, generally with considerable dosage flexibility.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. One patient exhibiting drug dependency by taking a chronic overdose developed upon cessation questionable withdrawal symptoms. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6 to 12 year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leukopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever, euphoria and dysmetria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax®
(oxazepam)

Wyeth®
SERVICE TO MEDICINE

Wyeth Laboratories
Philadelphia, Pa.

New
low-cost tetracycline/antifungal therapy

for broad-spectrum activity
plus specific antifungal prophylaxis
at significant patient savings

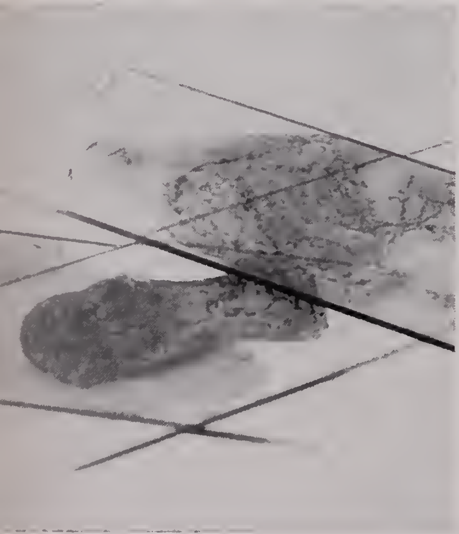
Whenever tetracycline is indicated in these candidates for Candida:

1. diabetic patients

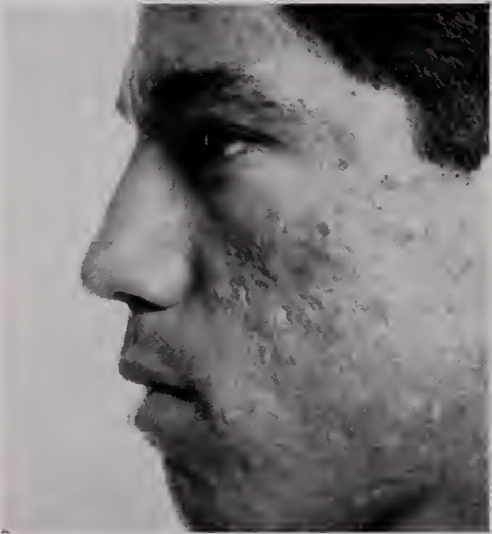
2. nonpregnant women with a history of recent or recurrent monilial vaginitis

3. elderly or debilitated patients

4. patients with a past history of moniliasis



5. patients on long-term tetracycline or corticosteroid therapy



PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood.) *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York

Tetrex-F®

Each capsule contains tetracycline phosphate complex equivalent to tetracycline hydrochloride 250 mg. and nystatin 250,000 units.

People keep asking us:

"Why do you call the

FILTER QUEEN

a sanitation system

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FOR THE BIG DIFFERENCE
SEE THE NEXT TWO PAGES

Only FILTER

(The problem of overcoming increasing air pollution is one of the most urgent facing your institution and the entire communit today. How FILTER QUEEN, through its unique, patented Filter Cone helps combat air pollution while it cleans, should b of vital interest to every member of your hospital staff. We hope you will mark these pages and route them accordingly

1. Every hospital has its dust and odor problems.

Dramatic smoke test shows how FILTER QUEEN removes air-borne contaminants and offensive odors

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3. FILTER QUEEN quickly removes air-borne contaminants while it vacuu

QUEEN helps purify he air while it cleans!

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FEW OF THE HUNDREDS OF HOSPITALS NOW USING FILTER QUEEN:

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ical College of Virginia	Richmond, Virginia
hwestern Hospital	Minneapolis, Minnesota
look Hospital	Summit, New Jersey
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en's Hospital	Honolulu, Hawaii
ohn's Memorial Hospital	Anderson, Indiana
ester City Hospital	Worcester, Massachusetts

The engineers who perfected the FILTER QUEEN machine clearly recognized that all bag-type vacuum cleaners cannot operate with maximum efficiency because they use a porous bag. So, to make suction cleaning action truly efficient, they had to find a way to overcome the leakage in dust and dirt that so often occurs whenever a porous bag is used.

The highly successful result was an entirely *different* air flow principle, known today as Cyclonic Cleaning Action. By using Cyclonic Cleaning Action, FILTER QUEEN'S designers succeeded in not only collecting the dust and dirt normally collected by vacuuming; they also succeeded in trapping almost invisible airborne contaminants that formerly escaped back to repollute the air.

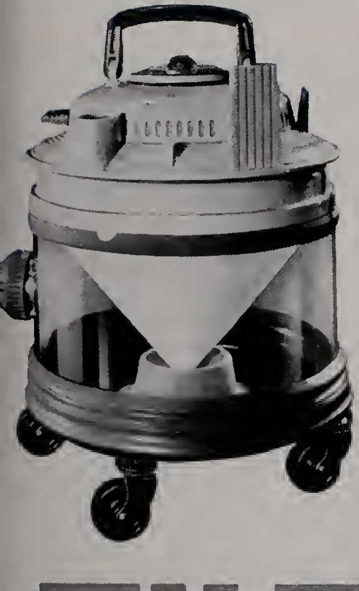
The difference between FILTER QUEEN'S remarkable Cyclonic Cleaning Action and ordinary vacuuming becomes immediately apparent when the Smoke Test pictured at left is made. Smoke, other contaminants and offensive odors virtually disappear. The room not only smells clean—it *is* clean!

The key to this almost magic action is FILTER QUEEN'S patented Sanitary Filter Cone. (See illustration.) Inrushing air, laden with dirt and dust, is deflected by a patented inlet guide as it enters the FILTER QUEEN container, then is whirled away by centrifugal force. Foreign matter heavier than air is forced to the bottom and the sides.

Clean air is filtered through our exclusive Sanitary Filter Cone *above* floor level, leaving smoke as well as dirt and dust trapped in the container. That is why hundreds of hospitals and other institutions insist on the FILTER QUEEN Sanitation System over any type of vacuum cleaner.

Ask your local FILTER QUEEN Distributor to make FILTER QUEEN'S dramatic Smoke Test in your hospital. Then you will *KNOW* why we proudly call it a FILTER QUEEN Sanitation System instead of a "vacuum cleaner."

DOCUMENTARY PROOF: *We would like to send you, with our compliments, an article entitled "Air Hygiene for Hospitals" which appeared in the Journal of the American Medical Association. In this article it is explained what happened to airborne contaminants when a FILTER QUEEN was used in a series of rigidly controlled tests conducted at the Harvard Medical School. Write to Health-Mor, Inc., 203 North Wabash Ave., Chicago, Illinois 60601*



The FILTER QUEEN sanitary filter cone is a scientifically-designed dust separator, composed of a special long-fibred mat of pure cellulose, chemically treated to give it the necessary strength and air-filtering characteristics.

FILTER QUEEN is a product of HEALTH-MOR, INC.,
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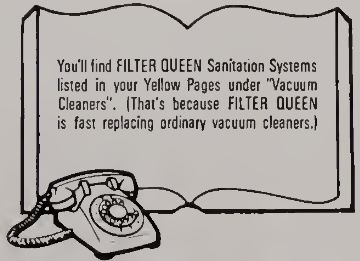

You'll find FILTER QUEEN Sanitation Systems listed in your Yellow Pages under "Vacuum Cleaners". (That's because FILTER QUEEN is fast replacing ordinary vacuum cleaners.)

FILTER QUEEN

The cleaning method that does so much more it has to be called a Sanitation System.

The full ¼ grain of phenobarb in the formula
takes the nervous edge off the pain
...helps bring out the best in codeine

Phenaphen® with Codeine the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:
Phenobarbital (¼ gr.) .... 16.2 mg.
(Warning: may be habit forming)
Aspirin (2½ gr.) ....162.0 mg.
Phenacetin (3 gr.) ....194.0 mg.
Hyoscyamine sulfate ....0.031 mg.
Codeine phosphate..............¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)

Contraindications: Hypersensitivity to any ingredient.
Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.
Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

A-H-ROBINS

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For adolescents, acne is "...an affliction which immediately separates these people from their confreres."* Washing with pHisoHex, from the first sign of acne, can help your patients—even with severe forms—through the "acne decade" (12-22). Three or four thorough daily washes with powerful, antibacterial pHisoHex enhance any acne regimen. Faster, better results help restore self-confidence.

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*Kligman, A. M., in Ludwig, G. D., and Elsom, Katherine O. (Eds.): *Am. Pract.* 13:200, March, 1962.

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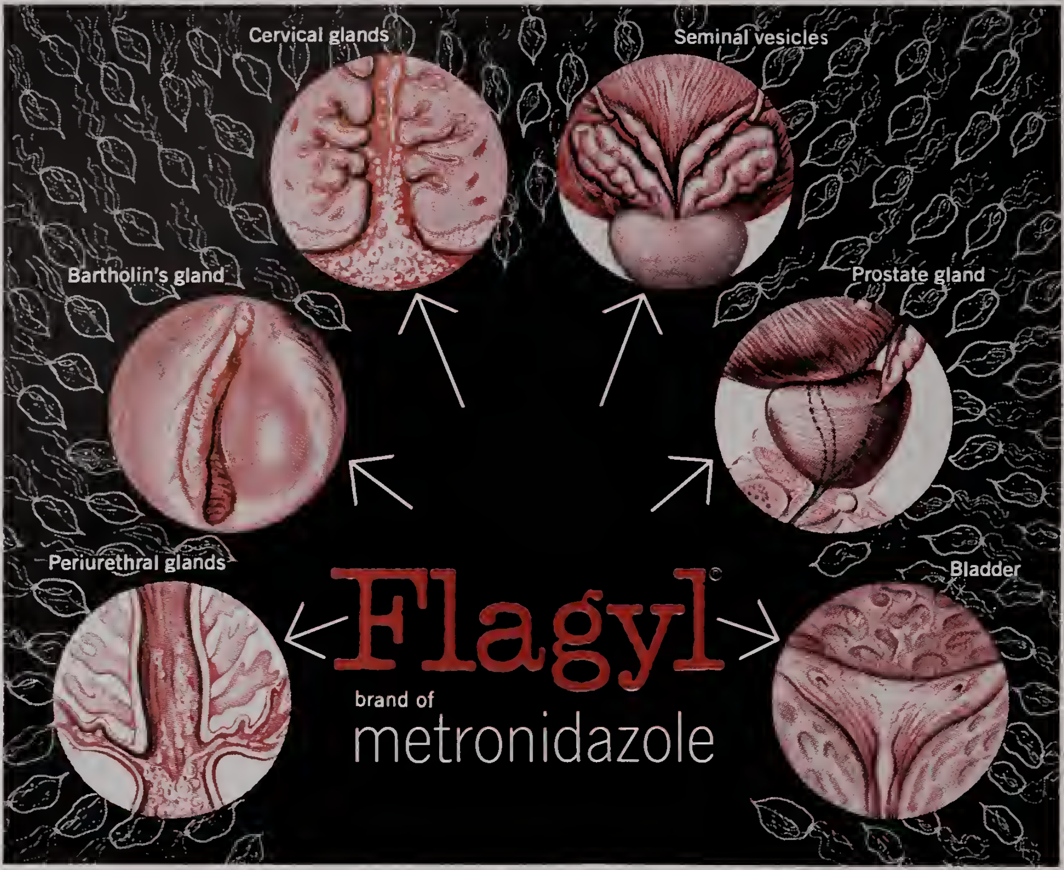

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Side Effects – Infrequent and minor side effects include nausea, metallic taste, furry tongue and headache. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness of an extremity, joint pains, confusion, irritability, weakness, flushing, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

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Manuscript Contest

Interns and residents in the Northwest are eligible to compete for a new award, established by the Board of Trustees of Northwest Medical Publishing Association. First such award will be made this year, and manuscripts are to be submitted by July 1, 1967. The prize fund has been established as result of an agreement with producers of the Encyclopaedia Britannica in connection with their offer to readers of this journal. They have also contributed a 24 volume set of the Encyclopaedia to be used as part of the prize award. Author of the winning manuscript will receive $200 in cash, a bronze plaque, and the Encyclopaedia. Rules for the contest are as follows:

1. Those eligible to compete must be enrolled in an internship or residency approved by the American Medical Association.

2. The article may present any subject in the general field of medicine. If in the field of fundamental investigation, current or future application to clinical medicine will be considered by the judges.

3. The manuscript should not comprise more than five and one-half double-spaced, typewritten pages. The manuscript should be submitted in form described in a printed list, obtainable from the editor.

4. Manuscripts must be submitted to the Editor of Northwest Medicine, not later than 1 July, 1967. Accompanying letter must indicate entry in this competition.

5. Manuscripts will be judged by a committee of the Editorial Advisory Board of Northwest Medicine.

6. The winning manuscript will be published in Northwest Medicine. Other manuscripts may be accepted for publication if recommended by the judges. Such selection shall constitute an Honorable Mention award.

7. Prize award will be made at an annual meeting of the state medical association of the state from which the manuscript originated.

An Answer For Chronic Uremia

Chronic or maintenance hemodialysis has become an effective and progressively a more practical therapy for patients with endstage renal disease. Numerous investigators in the recent past have amply demonstrated its effectiveness in patient rehabilitation when administered within the kidney center atmosphere. But the high costs ($10,000 per patient per year) and the necessity of living near a kidney center have been a barrier to its widespread use.

Recent work, performed first in England and the University of Washington, and later at the Spokane and Inland Empire Artificial Kidney Center and at the Seattle Artificial Kidney Center, has shown that chronic hemodialysis can safely and effectively be accomplished in the home. Medical research teams working with industry have developed dialysis equipment suitable for unattended dialysis in the home. The objective of this approach is to allow the patient to treat himself, unattended, with equipment designed to alarm and awaken him in the event of any medical or mechanical problem. This has been accomplished and equipment such as this is currently being used by approximately 30 patients in Washington State.

This represents a significant step forward in dialysis therapy, cutting the costs almost in half ($5,000-$6,000 per year) and providing a safe, convenient therapy distant from the kidney center.

These advances have occurred in the short seven year period since chronic hemodialysis was first tried by Scribner et al in 1960. Present day equipment still leaves much to be desired in simplicity, cost and efficiency, but engineering and industry are applying considerable effort to correct current shortcomings.

The fact that success with chronic hemodialysis has been accomplished with the relatively crude and inefficient equipment presently in use is ample testimony that hemodialysis works. The real problem of providing therapy for everyone needing it can be viewed as a machine problem. In view of the recent interest and progress in equipment development, it is quite realistic to expect that within the near future (five years), simple, efficient and inexpensive equipment will be available for all who need it. This equipment would come in two parts: one part approximately the size of a Seattle telephone book, the dialyzer; and the other part, a fluid supply system, the size of a 10 gallon milk can. It could be inexpensive and efficient enough so that the patient could treat himself two to three hours every day, allowing him to eat a normal diet and live a normal life. On a regimen such as this, the difficulties and complications of medical management could be essentially nil.

In order to cope with this problem medically, additional practicing physicians in the community will need familiarization with chronic hemodialysis. It appears necessary and desirable to integrate this program into the regular practice of medicine. In those patients already on home dialysis, this has been accomplished by a brief one week orientation of the patient's private physician at the training center. The patient's physician then oversees the home treatment and refers specific problems back to the center. An organized hemodialysis training course, supported by the U. S. Public Health Service, will be offered this Spring under the joint auspices of the Seattle Artificial Kidney Center and the University of Washington, Division of Continuing Medical Education. This will allow interested internists the opportunity to learn fluid and electrolyte management and hemodialysis while supported by a U. S. Public Health Service Stipend. It is hoped that this training course will facilitate the home dialysis program.

Does this sound realistic? Wait five years and see. By then, much of this speculation will have become fact. *Jerry P. Pendras, M.D.*

Hospital Heliports

Nowhere is there greater opportunity to improve the quality of medical care than in the handling of victims of automobile trauma. Improvement is not entirely a medical problem but medical considerations dictate the moves that should be made and the first moves are in transportation and hospital service. High quality medical care begins when the patient is delivered to the point at which it can be given, and frequently depends on the promptness of delivery.

It has been well established that death rates are higher in rural accidents than in those occurring in urban areas. Waller, et al, after a study of 782 traffic deaths in California, concluded that the only important difference was in the time between injury and death.[1] Those injured in rural areas were less likely to be discovered promptly and even when discovered were not moved to hospitals as quickly after the accident.

It has also been well established that swift transportation, triage, and prompt delivery to a treatment facility will materially reduce mortality. In World War I the mortality rate for those injured in combat was 8.5 per cent. In World War II it was 4.5. In the Korean War it had been reduced to 2.2 per cent and now, in the Viet Nam war, it is even lower. Loss is less than 1 per cent of those brought to the hospital alive. A large part of the improvement is attributed to use of helicopters.

Nothing could be more clear than the inference to be drawn. Move victims of traffic accidents swiftly to facilities equipped and staffed to handle them and the mortality rates will be reduced. It is astounding that so little has been done. It is astounding that so little attention has been paid to a source of death and injury that kills more than 50,000 people every year, causes disabling injuries of nearly 2,000,000 and creates economic loss of $9.8 billion.

Just as the technical information now being put to use in coronary care units was available many years before it was finally applied, the technical information, and the necessary mechanisms, for reducing the highway toll are already at hand. They are nothing more than ambulances, helicopters, two-way radio, and hospitals.

All that is needed is organization. Why wait for more thousands to die before life-saving plans are put into operation?

Ground transportation in cities is generally good. Ambulances are available from many points within each community and most are already equipped with radio. Large metropolitan hospitals have all the equipment necessary and most have staff enough to handle emergencies. With short notice by radio they can be ready. The area served, however, may not equate with potential of the hospital to serve. Those hospitals adequately staffed and equipped should be serving a much greater area than that limited by exclusive employment of ground transportation. If they are to do so, they must take advantage of the real opportunity offered by helicopter transport of the injured.

There are, at present, only 34 hospitals in the United States with heliports on the roof or in adjacent grounds. The Federal Aviation Agency lists only two heliports at hospitals in the Northwest, one at Pendleton, Oregon and one at Port Angeles, Washington, although helicopters have landed in nearby open areas at a few hospitals. Cost of preparing a heliport is almost ridiculous. Those now in use at hospitals varied in cost from $100 to $40,000 but most were in the range from $1,000 to $3,000. Maintenance is minimal and insurance may be obtained at a surprisingly low figure.[2]

Swift transportation of the injured can expand the area served by the hospitals best equipped to handle the victims of automobile trauma. There is, at present, no better opportunity to improve quality of medical care than by organizing for this service to the injured. The knowledge and the techniques are at hand. How long must we wait for them to be applied? ■

H. L. H.

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Ethical Responsibilities in Prescribing Drugs and Devices

It is unethical for a physician to be influenced in the prescribing of drugs or devices by his direct or indirect financial interest in a pharmaceutical firm or other supplier. It is immaterial whether the firm manufactures or repackages the products involved.

It is unethical for a physician to own stock or have a direct or indirect financial interest in a firm that uses its relationship with physician-stockholders as a means of inducing or influencing them to prescribe the firm's products. Practicing physicians should divest themselves of any financial interest in firms that use this form of sales promotion. Reputable firms rely upon quality and efficacy to sell their products under competitive circumstances, and not upon appeal to physicians with financial involvements which might influence them in their prescribing.

Prescribing for patients involves more than the designation of drugs or devices which are most likely to prove efficacious in the treatment of a patient. The physician has an ethical responsibility to assure that high quality products will be dispensed to his patient. Obviously, the benefits of the physician's skill are diminished if the patient receives drugs or devices of inferior quality.

Inasmuch as the physician should also be mindful of the cost to his patients of drugs or devices he prescribes, he may properly discuss with patients both quality and cost. ■

Adopted by the Judicial Council, American Medical Association, March 12, 1967.

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Medical-Legal Responsibilities in Discharging Hospitalized Psychiatric Patients

CHARLES H. JONES, M.D., Portland, Oregon

Basis of Washington statute defining mental illness is legal—not medical. Involuntary hospitalization, therefore, is a judicial procedure and discharge must be directed by physicians acting in official capacity. Others, discharging on the basis of clinical opinion, do so at the risk of lawsuit if trouble should arise. No difficulty is experienced by those who understand the requirements of Washington law and work within its provisions. But trouble does arise when there is philosophic disagreement with Washington law and refusal to comply with its provisions. Philosophy of the social psychiatrists embraces the practice of very early discharge from mental institutions and belief that patients are held because hospitals, rather than the patients, are sick.

Current trends in hospitalizing psychiatric patients emphasize: voluntary admissions, increasing acceptance of early treatment, shorter periods of stay, expanding use of private psychiatric and general hospitals, and broadening of financial support for treatment. These trends stem from the affluence of the capitalistic economy of this country and must be regarded favorably. However, resulting re-alignments of responsibilities have led to problems.

legal philosophies persist

There has been considerable increase in the number of decisions physicians make about hospitalization of psychiatric patients and plans for discharge of convalescent and seemingly asymptomatic patients. Also, there has been a relative shift in decision making from public mental hospitals to private physicians. Yet, while medical methods of providing psychiatric care and treatment have been undergoing evolutionary changes, laws governing admission and discharge of the mentally ill have been modified only infrequently, and basic legal philosophies have persisted. This has been particularly true of the laws of Washington. It is the purpose of this paper, therefore, to examine these laws to show that they favor progress and innovation; and to show that many of today's problems are due to failure of physicians to understand what the laws are or to follow them.

Much mischief is due to failure to distinguish between medical concepts of clinical psychiatry and the legal concept of keeping the public peace. Washington's first mental hospital was established in territorial days to keep the public peace, not to provide governmental medical services. Today, nearly 100 years later, after myriad changes and much tinkering with Washington's laws relating to lunacy, insanity, and mental illness, the same legal philosophy prevails.

definition

It cannot be denied that mental illness in the State of Washington has a specific legal meaning: "Mentally ill person shall mean any person found to be suffering from psychosis or other disease impairing his mental health, and the symptoms of such disease are of a suicidal, homocidal, or incendiary nature or of such a nature which would render such person dangerous to his own life or to the lives or property of others."[1] Thus, a patient with any psychiatric condition that might be found in the Standard Nomenclature of Mental Disorders of the American Psychiatric Association is not mentally ill until so adjudicated.

Definitions of mental illness of 48 states have been examined[2] and only Washington's contains the word *found*. This demonstrates that the process of adjudication is in the definition of mental illness itself. Also, the definition clearly states that a mentally ill person does not have to be psychotic but may suffer from another disease. If the final requirement that the patient

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Presented to the Annual Meeting of the Washington State Medical Association, Spokane, September 20, 1966.

Dr. Jones is Psychiatrist-in-Chief, Henry Waldo Coe Foundation, Portland, Oregon.

is dangerous cannot be demonstrated, a person with a psychiatric disorder cannot be involuntarily hospitalized by a court.

Washington's definition of mental illness is sufficiently broad that separate laws on the incarceration of psychopathic delinquents,[3] sexual psychopaths,[4] and narcotic addicts[5] are redundant, and a special law for the commitment of alcoholics is not necessary. That such laws exist for the first three categories and that there is continued agitation for a law governing the latter, indicates public and legislative dissatisfaction and distrust that Washington's mental illness laws have not been, or will not be, scrupulously followed. This fear is patently justified by the fact that a very adequate existing law for narcotic addicts is totally ignored.

discharge is an official act

The departure of a patient from where he has been involuntarily hospitalized is brought about by legal rather than medical means. In this instance, instead of a judge, the superintendent of a state hospital or the chief medical officer of another suitable place acts in a judicial capacity. "Whenever in the judgment of the superintendent of any state hospital, any patient shall so far recover as to make it safe for such patient and for the public to allow him to be at large, the superintendent may parole such patient, allow him to leave such hospital, and whenever in the judgment of the superintendent the patient has been restored his mental health and is probably free from danger from relapse or recurrence—the superintendent may discharge the patient. . . . The superintendent may parole patient on such terms and conditions as he may deem advisable."[6]

That the superintendent acts in a judicial capacity and must so act has been upheld by Washington's Supreme Court in three landmark decisions.

1. In the case of Emory vs. Littlejohn in 1915, the court held that the superintendent acts in his official capacity in matter involving his discretion in discharging inmates temporarily on parole pursuant to statutes; hence, he is not liable for damages sustained by a third person by reason of turning inmate at large where he did not act maliciously or corruptly.[7]
2. In State vs. Bonner in 1959, it was held that a parole of a patient from a state hospital simply indicates the patient's condition, in the opinion of the superintendent, has improved to such extent that he is safe to be at large.[8]
3. In the case of Higden in 1948, it was held that one who has been committed to the hospital for insane will be presumed to still be insane and unsafe to be at large where there has been no determination by the superintendent of the hospital or by court that the patient has recovered his sanity.[9]

In addition to parole and discharge of involuntarily hospitalized patients, the superintendent of a state hospital acts in a judicial capacity in admitting and discharging voluntary patients, "Pursuant to rules and regulation established by the Department, the superintendent . . . may receive and detain any person who is, in his opinion, a suitable person for care and treatment as mentally ill or for observation as to the existence of mental illness upon the receipt of a written application of the person or others on his behalf."[10]

only dangerous can be admitted

In many states a psychiatric patient in the need of treatment may be voluntarily admitted to a state hospital without being dangerous to be at large—not so in Washington. Washington's law requires the superintendent to find the patient mentally ill or in need of observation. Thus, by the very nature of Washington's definition, the patient must have or be apt to have a psychosis or other disorder impairing his mental health to an extent that he is dangerous.

That voluntarily admitted patients are considered dangerous or that they can become dangerous is further indicated by the language of the law in respect to their discharge. "No adult person received in a state hospital under his voluntary application shall be detained therein for more than twelve days after having given notice in writing to the superintendent of his intentions to leave. . . . If the superintendent believes that further care, treatment, or restraint is required, he shall within the twelve-day period start proceedings for involuntary hospitalization. . . . Provided, however, that if said notice is given within less than 18 days from the date of admission, the superintendent shall have the right to detain such voluntary patient for a period of not to exceed 30 days from the time of admission."[11] This section definitely requires commitment proceedings on voluntarily admitted patients who are, in the superintendent's opinion, dangerous to be at large at the time a notice is received that the patient intends to leave.

Commitment has proven very efficacious in aborting unwise or impetuous departures. After the law has been explained to a voluntary patient, he must decide whether he wants to remain in the hospital on a voluntary or on an involuntary basis. The point is that he is made to understand that he will not be leaving the hospital in any event.

responsibility of superintendent

A superintendent must face up to his personal responsibility to act judicially. This cannot be delegated or shared and attempts to do so are fraught with risks. Also I deplore a tendency of some superintendents to whine that they are incompetent to guarantee the correctness of their decisions. The law does not require this. The law requires merely that they do their best in a responsible, deliberate, and prudent fashion. This is consistent with what physicians are legally required to do throughout all of medicine.

Physicians in private psychiatric, and general hospitals, in clinics, and in their private offices are being required more and more to make legal adjudications of mental illness. Some requirements are clearly stated in Washington law. One, in particular, is implicit rather than stated.

Any sheriff, peace officer, superintendent, or chief medical officer in charge of a licensed hospital can determine that a person at large is mentally ill, and further can apprehend and detain him.[12] After such emergency detention, a licensed physician is required to confirm the mental illness within 12 hours or the patient must be released.[13] If he is found to be mentally ill, he may be admitted, detained, and treated in a hospital or in quarters designated by a court. However, after 72 hours, he must be released unless application is made for involuntary hospitalization. The application must contain a signed statement by the examining physician that the person is mentally ill.[14]

release can be abandonment

A situation requiring a finding of mental illness is that which arises when a voluntarily hospitalized patient in a private psychiatric or general hospital insists upon leaving and the clinical nature of his illness is such that he is dangerous to be at large. Here, the physician must make an adjudication of mental illness, not only on an ethical basis of his medical contract with the patient, but also because he might incur liability for damages if he does not. The law offers him ample opportunity, authority and protection to detain the patient until a proper court hearing is held.

The practice of allowing a dangerous psychiatric patient to leave a hospital after signing a statement that he is doing so against medical advice cannot be too strongly deplored, not only from the standpoint of patient abandonment but also because the physician thus places himself in a position where he can be sued.

It may be argued that in demanding to leave the hospital against advice, the patient has dismissed the attending physician. This argument overlooks the fact that each physician licensed to practice in Washington becomes thereby an agent or officer of the state.

A physician with a dangerous psychiatric patient in his office, or any other place outside a hospital, has the very same legal obligation to contact a peace officer so that the patient might be apprehended and subsequently processed by a superior court.

The most significant question of this presentation now arises. Is there anyone practicing today who is so infatuated with his own charisma that he thinks he has the right to allow a dangerous psychiatric patient to circulate freely in the community?

The preceding discussion has reviewed, in hasty fashion, some of the laws of Washington relating to the mentally ill with particular emphasis on adjudication of the term *mentally ill.* At first glance, the uninitiated and uninformed might think these laws are unduly restrictive, punitive, or anti-therapeutic. Such is not the case. They have nothing to do with restricting psychiatric patients and make no demands on them or their physicians unless the patients are dangerous. In this event, the laws demand that the danger not be ignored and that action be taken.

In respect to therapy, I agree with Hoedemaker, who has noted that frequently psychotherapy of paranoid patients cannot really start until the patient becomes convinced that his doctor understands the severity of his illness and cares enough about him to deprive him of his liberty.[15]

compliance prevents trouble

It has been my observation that psychiatrists who understand Washington's laws have little difficulty in treating their patients. More than from outright ignorance of medical-legal principles, trouble arises from psychiatrists who have come to Washington with a smattering of knowledge of the laws of other states, and assume that similar stipulations and philosophies prevail here. The most trouble of all stems from physicians who are in philosophical disagreement with Washington's laws and disregard them.

Ignorance and misunderstanding of the law could be partially overcome by the Washington State Board of Medical Examiners if psychiatry were required as a clinical subject in examination for medical licensure, and especially if forensic psychiatry were emphasized. This suggestion is made in the hope that Washington State Medical Association might recommend to the Board of Medical Examiners that this be done.

blatant disregard

A blatant disregard for laws, except those with which they agree, seems to be a congenital anomaly of advocates of something known as "social psychiatry." I have made unflattering comments about this school of thought elsewhere[16] and particularly before this association two years ago.[17] Thus, detailed description of the fad is unnecessary. Briefly, however, it can be stated that social psychiatrists hold that, except for conditions due to organic brain damage, chronic psychiatric disorders are socially induced. Perpetuation of such disorders is attributed to continued social conflict, the most heinous example being that experienced in a state hospital milieu. Consequently, chronic psychiatric illness is said to be prevented if only hospitalized patients are quickly turned loose. Rapid discharge is usually preceeded by a "laying on of hands" in the form of stunning the patient with massive doses of tranquilizers. Years ago this was known as chemical restraint and was strongly criticized. I think this treatment relic still deserves criticism on its demerits and as a panacea it is ridiculous. Frankly, in light of many years experience in discharging state hospital patients, I have no faith in an alleged 21 day cure of schizophrenia.

Happily, the days of warehousing recovered patients in state hospitals through disinterest, neglect, and insufficient medical staff are generally past. I pray, however, that this abuse will not be followed by one in which half-sick patients are abandoned and ignored by scattering them haphazardly throughout the general population.

There seems to be a bandwagon rush these days to pervert state programs to harmonize with the tenets of social psychiatry so that ubiquitous yet elusive federal funds might be captured. In this regard, I am apprehensive that we might be fast approaching a state of corruption alluded to in Emory vs. Littlejohn through influence on hospital superindentents of arrogant governmental bureaucrats, professional and nonprofessional, who enact administrative law in stealth. Legally, corruption of an officer means inducing him, by means of improper considerations, to commit a violation of duty.

sick hospitals

My apprehension is based on the knowledge that social psychiatrists are vigorously striving to abolish state hospitals altogether; not from admiration of our capitalistic system or from conclusion that psychiatric patients might be better and more economically treated in private mental hospitals. Rather, social psychiatrists appear to feel passionately that people stay in state hospitals because the hospitals rather than the patients are sick. In the interest of scientific medical care and treatment of the mentally ill and of protection of the public peace, I sincerely hope that the current fad of social psychiatry proves to be nothing more than a passing fancy.

In conclusion, I entreat physicians interested in the welfare of psychiatric patients to exhaust fully the potentials of today's laws by insisting on responsible and creative administration of them. Little is to be gained by being distracted by one of the oldest ploys of politics; namely, attributing program failures to legal deficiencies and circumstantial intangibles rather than to personal incompetence or administrative bungling. New laws will solve nothing if legal principles protecting patients and the public peace, which of necessity must be contained therein, are perverted and ignored in deference to speculative social theory. ■

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abstracto

Las base del estatuto de Washington para definir enfermedades mentales es legal y no médica. La hospitalización involuntaria, de tal manera, es un procedimiento judicial y la orden de salida debe ser dada por médicos actuando en capacidad oficial. Aquellos que dan de baja basándose en la opinión clínica, lo hacen a riesgo de un juicio en caso de que se presentara alguna dificultad. Aquellos que comprenden los requisitos de la ley de Washington y trabajan dentro de su esfera no experiencian ninguna dificultad. Pero las dificultades se presentan cuando hay desacuerdo filosófico con la ley de Washington y rehuso de cumplir con sus mandatos. La filosofía de los psiquiatras sociales incluye la práctica de dar de baja prematuramente de los hospitales mentales y creen que los pacientes son detenidos por que los hospitales y no los pacientes estan enfermos.

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Definition of the Family Physician

The family physician is one who: 1) serves as the physician of first contact with the patient and provides a means of entry into the health care system; 2) evaluates the patient's total health needs, provides personal medical care within one or more fields of medicine, and refers the patient when indicated to appropriate sources of care while preserving the continuity of his care; 3) assumes responsibility for the patient's comprehensive and continuous health care and acts as leader or coordinator of the team that provides health services; and 4) accepts responsibility for the patient's total health care within the context of his environment, including the community and the family or comparable social unit.

The family physician is a personal physician, oriented to the whole patient, who practices both scientific and humanistic medicine. He may provide care for only one member of the family, but more often does so for several or all members. Usually he himself provides medical care in more than one of the traditional specialty fields of medicine, and he coodinates the care obtained by referral to or consultation with other physicians and allied health personnel. He assumes responsibility for the patient's comprehensive and continuing health care and in effect serves as captain of the health team.

The report of the Ad Hoc (Willard) Committee on Education for Family Practice of the Council on Medical Education American Medical Association, Sept. 1966.

Peptic Ulcer Disease in Children

Part I, Clinical and Laboratory Study

LEWIS J. KRAKAUER, M.D., JOHN R. BERRY, M.D., Corvallis, Oregon,
JEAN A. STEWART, Ph.D., Portland, Oregon

Twenty-seven children with proven duodenal ulcer are compared with matched controls. The ulcer group had certain impressive differences in the environmental aspects of school, family and social interaction. A strong hereditary factor was suggested. A pattern of fixed hypersecretion was not defined in the ulcer group.

Peptic ulcer in the child and adolescent is commonly considered an atypical occurrence. It is our contention that, on the contrary, ulcers in children may be a commonplace entity, usually presenting with an atypical symptom pattern.

Excellent reviews of this subject have not been lacking.[1-6] However, prior reviews have given little if any attention to studies of gastric-secretory activity and to details of psychological structure and background.

controlled series

The present paper reports 27 children with radiographically demonstrated duodenal ulcers, each compared with a matched control.* Twenty-four-hour urinary uropepsin determinations were carried out in all. Interviews in depth were held with parents and children to explore family relationships and other pertinent environmental factors.

Detailed psychometric and psychological evaluation was also carried out in the subjects and in the matched controls. Data have been presented in another communication.[7]

The ulcer group consisted of 14 girls and 13 boys, ranging in age from 5 to 12. Diagnosis was confirmed radiographically in each instance. Serial x-ray evidence of healing was demonstrated in five. As a general principle, fluoroscopic and routine views were kept to a minimum, and follow-up x-rays in all subjects were considered to have no recommendation other than to satisfy academic curiosity.

The control group was matched in age, sex, and intelligence quotient, and was from the same schools and similar socio-economic background.

This study was continued over a four-year period, in a community of 25,000 with a medical hinterland of approximately 60,000.** For arbitrary purposes and precision of control, the age limits of this report were defined as 5 to 12. The occasional ulcer that we have observed below the age of 5 would pose some difficulties in the area of personal interview. Those older than 12, with varying patterns of maturity, would blend into the adult physical and emotional patterns. Ulcer disease in adolescence in our experience and in that of others, is by no means rare.[4-6]

1. *Secretory studies.* Twenty-four-hour urinary uropepsins were obtained in all subjects and controls. A 24-hour urine sample was collected, unacidified, at home, and fresh aliquots were run in accordance with the methods of Bucher, Anson, and Mirsky, as described by Gray, et al.[8-11]

The range of values for the 24-hour uropepsin ran from 640 to 5,187 units in the ulcer group, and from 600 to 6,040 in the controls. There was no significant difference in the mean uropepsin excretion in the control group versus the ulcer group, the mean for the former being 1,859, standard error (S.E.) ± 366, and the mean for the ulcer group, 1,918, standard error, ± 412.

All studies were done on an out-patient population. The urinary uropepsin determination lends itself to an out-patient setting and especially so in this age group. Twelve hour basal intubated secretory collections, admittedly more

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*Part 2 of this study has been accepted for publication in **The Journal of Experimental Psychology.**

**Observations subsequent to the time limits of this study have continued to establish the diagnosis of peptic ulcer at approximately a similar rate, with a total series of ulcer disease at this point of over 50.

Table 1

	Control Yes %	Ulcer Yes %
1. Do you consider the child's relationship with his siblings to be poor?	11	30
2. Does the child come from a home in which the parents are divorced or one of the parents is deceased?	7	11
3. Is there any ulcer disease in the immediate family including parents or siblings?	30	64
4. Do you believe that ulcers are caused by diet?	9	10
5. Do you believe that ulcers are caused by emotions	82	85
6. Do you believe that ulcers are caused by heredity?	9	5
7. Are either of the parents in poor health?	30	48
8. Is there greater than a ten year differential in the parents?	0	7
9. Is the child the oldest child or the only child?	37	19
10. Is there a family history of ulcer? (included parents, siblings, grandparents and aunts and uncles of the child.)	63	88
11. Did the child have feeding difficulties as an infant?	11	44
12. Is there history of recurrent stomach difficulties in the siblings?	18	24
13. Do you consider this child to be different from other children?	0	63
14. Does the child have difficulty in adjusting to school?	4	30
15. Would you classify your child as a very good student, an average student or a poor student?		
Very good	44	41
Average	52	41
Poor	4	19
16. Does your child have social difficulties with other children?	0	15
17. Is the abdominal pain worse on school days?	0	33
18. Do you consider the child's relationship to be poor with his father?	4	19
19. Do you consider the relationship to be poor with the child's mother?	15	24

ideal as a precise measure of gastric secretory activity, were judged impractical because of the inability of youngsters to accept intubation with equanimity, even when placed in a closed hospital setting. All uropepsins were run by a single laboratory.

2. *Interview material.* In both the ulcer and control group, each child was interviewed and one or both parents (usually the mother) was asked a series of questions. The response to these questions is listed in Table 1.

hypersecretion not a feature

In adults with duodenal ulcer disease a high-mean, uropepsin level has been observed. Gray, et al, reported that the mean urinary uropepsin in 265 individuals with duodenal ulcer disease

Table 2

Relationship of Uropepsin to Gastric Pepsin During Chronic Stimulation with Corticotropin (ACTH)

Patient	Control period			Maximum response to ACTH stimulation		
	Gastric pepsin (units/hr.)	Uropepsin (units/hr.)	Uropepsin / pepsin	Gastric pepsin (units/hr.)	Uropepsin (units/hr.)	Uropepsin / pepsin
1	18,500	146	0.8%	56,000	468	0.8%
2	36,800	113	0.3%	63,000	218	0.3%
3	48,000	203	0.5%	120,000	428	0.4%
4	15,600	163	1.0%	69,300	483	0.9%
5	39,000	100	0.3%	99,700	242	0.2%
6	13,900	133	1.0%	41,500	329	0.8%

was 8,520 S.E. ± 260 compared with a mean of 3,670 S.E. ± 159 in 265 normal subjects[11-12] Clearly the results in our group of children as a whole (1,918 units for the children with ulcer disease and 1,859 units for the control) are significantly lower for both groups. That the children with ulcers did not differ from the control group proper, is perhaps of more significance than that adult levels of uropepsin were rarely approached. To explain this latter, one might postulate that the gastric secretory mass is less in the child than in the adult. It would seem reasonable to conclude that children with ulcer disease are not fixed hypersecretors, although a 24-hour urinary uropepsin cannot exclude the possibility of transient hypersecretory phenomena.

Urinary uropepsin has been shown to parallel gastric hydrochloric acid and pepsin activity fairly faithfully, Table 2.[11,13] Discussion as to renal threshhold effects or the precision of correlation of the urinary uropepsin versus the serum pepsin would not seem germane to the present area of interest.

critical age

We are impressed that duodenal ulcer disease is much less common before the age of 5. It may be coincidental that this is the age when the child leaves the security of maternal protection for nursery school, kindergarten and the elementary grades. School adjustment was often a major problem for the ulcer child. The school situation was a readily verbalized stress situation in the interviews with the ulcer group, but hardly the only such life stress. For example, sibling relationships were considered poor in a significantly greater number of ulcer children, as were parental relationships. The general social interaction was not as satisfactory in the ulcer group. It is also of interest to observe that the ulcer children were more prone than their controls to have had feeding problems in infancy.

That hereditary influence is operative is strongly suggested by the questionnaire, with 88 per cent of the ulcer group having a positive family history for ulcer disease. Both hereditary and environmental factors are implicated in the genesis of ulcer disease on the basis of these data.

A separate communication has reported the detailed psychological studies on these ulcer children.[7] In sum, these data indicated that ulcer children, usually of high intelligence, handled feelings of anger and frustration with difficulty. They were inclined to internalize their aggressive feelings and were more docile and submissive in a behavioral sense than the controls. Over-concern in the area of achievement was common to ulcer children and to their mothers. The personality differences between the ulcer children and the control group appear to be clear-cut, but there is no basis other than pure conjecture for interpreting these personality differences either as causal in ulcer formation or as a consequence thereof.

treatment

Experience in the realm of therapy has been encouraging. Within one to three weeks almost all ulcer patients became asymptomatic on a bland diet, anticholinergic drugs to tolerance, antacids, post-prandially and at bedtime, and usually small doses of barbiturates in the acute stage. The expectation, in our experience, is that approximately one-third to one-half of the group will have occasional periods of return of symptoms, indicating relapse. Only one patient of these 27 required surgery as intractable, and post-operatively did very well following subtotal gastric resection. Two patients in this series bled, neither to the point of requiring transfusion. The benignity of the course in this group as a whole is impressive. It may reflect early diagnosis and intensive therapy. On the other hand, this may be comparable to the experience with adult ulcer disease as seen in clinical practice.

Early diagnosis depends foremost on the pediatrician or family physician being alert to the fact that almost all pediatric ulcer pain presents in atypical fashion. Thus, any persistent or recurrent abdominal pain with or without nausea and vomiting, warrants careful upper gastrointestinal fluoroscopy. The emphasis must lie on the words persistent and recurrent. Alexander has pointed out the difficulties of pediatric fluoroscopy: particular attention of necessity should be given the irritable cap and any condition of sustained pylorospasm, with a careful search for the small niche.[14] Some duodenal caps may be very irritable and lacking true crater formation. These may not warrant the diagnosis of ulcer, but if significant symptoms are present, intensive therapy should be instituted in what is well termed a pre-ulcer suspect. Those of our patients who would qualify in this category have been excluded from the present study.

The early definition and intensive therapy of pediatric ulcer disease may be considered to have three main goals: 1. amelioration of distressing symptoms, 2. prevention of future complications of bleeding, perforation and obstruction, and 3. lastly and hopefully, that early and intensive therapy might forestall the development of the chronic diathesis leading to persistent and severe adult disease.

The point should be emphasized that ulcer disease in children is not uncommon if one is alert to its possibility and to the probability of an atypical presenting symptom pattern. ■

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abstracto

Veinte y siete niños con demonstrada úlcera duodenal fueron comparados con armonizados controles. El grupo con úlcera tuvo ciertas diferencias impresivas en los aspectos medioambientales de la escuela, familia e interacción social. La existencia de un fuerte factor hereditario fué sugerido. En el grupo con úlcera un patrón fijo de hipersecresión no pudo ser definido.

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Antibiotic Susceptibilities of Neisseria Gonorrheae Isolates

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The emergence of strains of Neisseria gonorrheae *with increased resistance to penicillin is an important problem in venereal disease control. There appears to be a relatively high incidence of such strains in the Seattle-King County area. Sixty-nine per cent of 54 isolates showed increased resistance to penicillin and were not inhibited by 0.05 units of penicillin per milliliter. Patients in whom penicillin treatment has failed to eradicate infection can be effectively treated orally, with either tetracycline or erythromycin.*

In recent years many physicians have become increasingly aware of changes in the response of gonorrhea to penicillin treatment. Immediately following the introduction of penicillin, all strains of *Neisseria gonorrheae* were susceptible in *vitro* to 0.05 units/ml or less and patients were almost always cured by a total dose of penicillin as low as 160,000 units.[1] Since 1955, workers at the Venereal Disease Branch of the Communicable Disease Center at Atlanta, Georgia, have maintained surveillance of the susceptibility to penicillin of the gonococcus and have reported a steadily increasing number of strains of greater *in vitro* resistance to penicillin, with some requiring 1.0 unit/ml or more for inhibition.[2] This changing pattern in susceptibility to penicillin represents a 20 fold increase in resistance over that found in earlier years. Concomitant with these laboratory observations has been the increasing number of clinical reports of failures of penicillin in the treatment of gonococcal infections [3,4] The incidence of *N. gonorrheae* with increased resistance to penicillin has been found to vary widely in different localities.[2] To ascertain the present status of gonococcal resistance to antibiotics in the Seattle-King County area the susceptibility of consecutive isolates of *N. gonorrheae* to four antibiotics was determined.

laboratory procedure

Fifty-four isolates of *N. gonorrheae* were obtained during November and December, 1965, from 52 male patients seen at the Venereal Disease Clinic of the Seattle-King County Health Department, the University of Washington Hospital, and King County Hospital. All *in vitro* studies were made at the University Hospital Clinical Microbiology Laboratory.

care of specimens

Swabs were taken from male patients with urethritis and immediately placed in Stuart's transport medium.[5] Upon arrival in the laboratory the swabs were used to inoculate divided plastic plates containing chocolate agar. To the medium on one half of the plate was added polymyxin B (25 units/ml) and ristocetin (10 μg/ml) as recommended by Thayer and Martin.[6] Most gonococci grow well in these concentrations of antibiotic while many other gram-negative and gram-positive microorganisms are inhibited. After 24 hours of incubation, morphologically typical colonies were selected for an oxidase test and a gram stain. Oxidase positive gram-negative diplococci were identified by carbohydrate fermentation in a cystine trypticase agar base. Organisms that fermented glucose and not maltose were stored in dextrose starch agar[7] at 37°C. until a sufficient number of isolates were accumulated for antibiotic susceptibility testing by the Steer's replicator plate method.[8]

plating

Medium for the susceptibility tests was made according to the description outlined in Public Health Services Bulletin No. 499.[9] In this medium, hemoglobin is used as a supplement in place of blood and thus eliminates albumen from the medium. This is desirable because albumen

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Table 1
Penicillin Susceptibility of 54 Gonococcal Isolates

MICs in Units/ml	Number of Isolates
0.01	5
0.05	12
0.1	12
0.2	6
0.4	10
0.6	3
0.8	5
1.0	1

Table 2
Susceptibility of 51 Gonococcal Isolates to Tetracycline, Erythromycin and Chloramphenicol

	MIC's in μg/ml			
	0.125	0.25	0.5	1.0
Tetracycline	2	29	9	12
Erythromycin	not tested	50	----	1
Chloramphenicol	not tested	19	27	3

Each figure designates the number of isolates of a given susceptibility.

has been shown to bind penicillin, and thereby appears to increase the minimal inhibitory concentration (MIC) of penicillin two to four fold.[2] Varying amounts of antibiotics were added to molten medium at 56C and the plates poured. The plates were prepared within 24 hours of use and contained the following final concentrations of antibiotics:

Penicillin 0.01, 0.05, 0.1, 0.2, 0.6, 0.8, and 1.0 units/ml.
Tetracycline 0.125, 0.25, 0.5, and 1.0 μg/ml.
Erythromycin 0.25, 0.5, 1.0, and 2.0 μg/ml.
Chloramphenicol 0.25, 0.5, 1.0, and 2.0 μg/ml.

broth

To obtain a relatively standard inoculum of gonococci, a colony was placed in 3.0 ml of Mueller-Hinton broth. After 24 hour incubation at 37C, the broth contained between 10^6 and $5x10^6$ organisms/ml. A 1/250 dilution in trypticase soy broth of this culture provided an inoculum yielding 20-100 colonies at the point of contact with the plate replicator. After imprinting, the seeded plates were incubated at 37C for 48 hours in a candle jar and the lowest dilution of antibiotic that completely inhibited growth of the gonococci was read as the MIC for that strain.

Five stock strains of *N. gonorrheae* of known susceptibility were obtained from the World Health Organization Reference Center, Copenhagen, Denmark, and from the Veneral Disease Research Laboratory, Communicable Disease Center, Atlanta, Georgia. These were included with each group of unknowns tested, and served as controls to evaluate the methods and media used in the study. The results of our antibiotic susceptibility testing of these isolates were in agreement with those obtained at the Veneral Disease Research Laboratory.

results

Susceptibility of the 54 gonococcal isolates to penicillin are shown in Table 1. Thirty-seven of the strains had MIC's above 0.05 units of penicillin per ml. The most resistant organism required 1.0 unit ~~of penicillin~~ per ml. to inhibit growth.

The susceptibility of these isolates to tetracycline, erythromycin and chloramphenicol is shown in Table 2. The majority of strains were inhibited by 0.25 units of tetracycline per ml. but 12 strains required 1.0 unit/ml to inhibit growth. All isolates were highly susceptible to erythromycin and chloramphenicol, except for a single strain that was inhibited by 1.0 unit of ery thromycin per ml.

discussion

The emergence of pathogens resistant to common antimicrobials has been witnessed repeatedly since the introduction of chemotherapy in the treatment of infectious disease. Initially, for instance, gonococci were susceptible to sulfonamides, but within a few years the majority were resistant both *in vitro* and *in vivo*.[10] However, the appearance of gonococci with increased penicillin resistance has been slower and less dramatic.

Following the initial reports of failures of penicillin therapy in gonococcal urethritis, it was postulated that persistence of infection was due to penicillin destruction by penicillinase-producing urethral contaminants, such as staphylococci, rather than to a change in penicillin susceptibility.[11] However, evidence existed in 1955 of an increase in penicillin resistance of some strains of the gonococcus.[12] In 1963 Kjellander and Finland showed that nine of ten patients who failed to respond to 600,000 units of procaine penicillin were infected with relatively resistant organisms.[4] These patients did not have significantly greater numbers of penicillinase producing staphylococci in their urethras than those who responded to penicillin. The occurrence of a gonorrhea-like syndrome which failed to respond to penicillin has also been reported as due to infection with the Mima-Herellea group.[13] These organisms can resemble *N. gonorrheae* morphologically and are resistant to penicillin. However, biochemical differentiation, and failure to grow on unenriched media excluded organisms of the Mima-Herellea group from the present study.

changes

Changes in the susceptibility of gonococci to penicillin have now been noted in many countries.[14] A recent survey of data collected from 6 cities in the United States showed a range of penicillin susceptibility from 0.005 to 1.7 units/ml, with a mode sensitivity of 0.05 units/ml. The percentage of resistant cultures above the mode ranged from 24 to 65 per cent.[15] Thus, the Seattle-King County area appears to have a significant problem with the more penicillin resistant gonococci, in that 69 per cent of strains in the present study had MIC's above 0.05 units/ml.

The origin of naturally occurring gonococcal resistance to penicillin remains speculative, but it appears likely that small step resistant mutants have been selected over the years by inadequate treatment of this extremely communicable disease. It has been suggested that many resistant organisms are imported from areas where monthly injections of benzathine penicillin are used in the prophylaxis of syphilis.[16] This may explain the relatively high incidence of penicillin resistance seen in seaport cities.

penicillin still best

Despite these observations, penicillin is still the drug of choice for gonococcal infections because the degree of gonococcal resistance has not yet exceeded attainable tissue levels. However, to achieve a cure in 80-90 per cent of patients, the presently recommended dose is 2.4 million units of procaine penicillin for acute gonococcal urethritis in men and 4.8 million units in women.[17] If infection persists or recurs, as judged by clinical or bacteriological findings, a decision must be made as to whether this represents a treatment failure or a reinfection. Differentiation between the two is difficult but the following guidelines have been useful in male patients with recurring gonococcal urethritis:

Treatment failure: The patient transiently improves but continues with some symptoms of discharge, dysuria, or both, and within a week relapses to the original clinical condition.

Reinfection: All symptoms clear within 36 hours and the patient appears cured. After a period of time, usually a week or more, symtoms recur. Because the female patient is often asymptomatic, the problem of differentiation is almost impossible in the absence of clear cut epidemiological evidence of re-exposure.

retreatment

The patient whose infection falls in the treatment failure category frequently can be cured with another larger dose of penicillin but it is often preferable to use another antimicrobial agent. The reinfected patient should again respond to the same dose of penicillin as was used initially. However, it is of utmost importance that contacts be located, examined and treated simultaneously if repeated reinfections are to be prevented. Re-exposure to an unlocated contact is far more common than is generally appreciated. In order to adequately locate and treat all possible sources of infection, every patient with gonococcal infection should be interviewed to obtain all the epidemiological information available.

For the patient whose disease has failed to respond to penicillin, and also for the patient who has a history of allergy to penicillin, another antimicrobial agent is often selected. Because of the unreliability of many patients with venereal disease, it is preferable to give a parenteral antimicrobial at the time of diagnosis. This permits a greater degree of confidence of cure regardless of whether follow-up culture is obtained.

Also it appears necessary to maintain antibiotic levels above the MIC of the infecting organism for at least 24 hours if a cure is to be achieved.[18] Streptomycin, in a dose of two grams given intramuscularly, has been used as an alternative to pencillin. However, pencillin resistant gonococci are usually also resistant to streptomycin, and frequent treatment failures can be expected with this drug.[2] Cephalothin is very rapidly excreted and poor results have been obtained in the treatment of gonorrhea.[19] Three other agents, erythromycin, tetracycline and chloramphenicol have been evaluated *in vitro* in the present study.

Sinse 1961 Thayer, et al, have reported an increase in resistance of gonococci to tetracycline.[2] Prior to 1961, all strains were susceptible to less than 0.5 μg/ml, but by 1964, 50 per cent of isolates from penicillin treatment failures were susceptible only to 1.0 μg/ml or more. Twelve, or 24 per cent, of our strains were only inhibited by concentrations of tetracycline of 1.0 μg/ml. This relative increase of resistance may reduce the value of the tetracyclines for treating gonococcal infections.

At present the recommended alternative to pencillin therapy for gonococcal infections is either erythromycin or tetracycline administered as 2 gm daily for five days. Both regimens have been shown to cure 85 to 90 per cent of infections.[20] A single two gram dose of erythromycin given orally at the time of diagnosis has been reported to cure over 90 per cent of male patients with acute gonorrhea and may be more suitable for unreliable patients.[21] Because of the occasional serious hematologic complication associated with chloramphenicol treatment, this drug should only be considered for hospitalized patients with life threatening gonococcal infections, such as pelvic inflammatory disease, bacteremia or arthritis.

for the future

Recently two parenteral antibiotics, cephaloridine and actinospectacin, have been reported to cure over 90 per cent of patients with acute gonorrhea. [22,23] These agents are not generally available and further studies are required to confirm these observations.

It seems probable that the incidence and degree of antibiotic resistance of gonococci may continue to increase slowly in the future. Should this prove to be the case, it may become important to determine the susceptibility of individual isolates from patients as a guide to therapy. Meanwhile, surveys such as the present one should continue to be made from time to time to assess any changes in antibiotic resistance of gonococci that may develop. ■

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chemical nomenclature

generic	trade
polymyxin B	Aerosporin
ristocetin	Spontin
tetracycline	Achromycin, Panmycin, Polycycline, Steclin, Tetracyn
erythromycin	Ilotycin, Erythrocin
chloramphenicol	Chloromycetin
cephalothin	Keflin

abstracto

El aparecimiento de cepas de Neisseria Gonorrheae *con aumentada resistencia a la penicilina es un importante problema en el control de la enfermedad venérea. En el área de Seattle, King County, parece haber una incidencia relativamente alta de esta cepa. Sesenta y nueve por ciento de 54 casos mostraron aumentada resistencia a la penicilina y no fueron inhibidas por 0.05 unidades de penicilina por milímetro. En pacientes en quienes el tratamiento de penicilina ha fallado para erradicar la infección, pueden ser tratados efectivamente por vía oral sea con tetraciclina o eritromicina.*

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The Common Interest

The creation of successful models of family practice will require somewhat different attitudes on the part of both medical school faculties and the local practicing profession. On the one hand the medical profession must be willing to see the physicians who form the faculty of the medical school or the training institution have access to a defined group of patients for total care, a significant portion of whom will be capable of paying for their care from private physicians. This group of patients should genuinely represent socio-economically a cross-section of the community, in order to provide a true picture of the problems of family practice. A group of indigent patients or the typical group seen in the outpatient clinic of a county hospital would not serve this purpose.

The profession must also be willing to tolerate and even to encourage the medical school to experiment in new ways of providing patient care and in organizing medical practice.

On the other hand, medical school faculties must deal with the profession with great candor, and the group of families which they need for their programs must be carefully defined and held to the limit determined necessary for teaching and research. Beyond this limit, which in most places will not be sufficiently large to have a significant impact upon the economic status of practicing physicians, the medical schools and teachng institutions should not be in competitive practice with community physicians. Medical schools should also incorporate into their programs as valued partners those community physicians who are qualified to contribute and are interested in doing so. In short, there is an opportunity to unite Town and Gown around programs of teaching, research, and patient care in which both parties should have a common interest in successful programs.

The Report of the Ad Hoc (Willard) Committee on Education for Family Practice of the Council On Medical Education, American Medical Association Sept. 1966

Eosinophilic Gastroenteritis

Two Cases with Incidental Hiatus Hernia

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Two cases of idiopathic eosinophilic infiltration of the gastrointestinal tract of the diffuse polycentric type, as classified by Ureles, are presented. Both responded dramatically to corticosteroid therapy and both had small sliding hiatus hernias.

This and similar conditions have been reported under various titles. Some of these are "Idiopathic Eosinophilic Infiltration of the Gastrointestinal Tract," "Granuloma with Eosinophils of the Stomach," "Allergic Jejunitis and Quincke's Edema," "Angioneurotic Edema of the Gastrointestinal Tract," "Eosinophilic Infiltration of the Stomach and Bowel," "Gastric Lesion of Loeffler's Syndrome," and "Primary Infiltrative Eosinophilic Gastritis, Enteritis and Peritonitis."

Ureles, et al, reviewed the literature, classified the disease, and collected a number of cases as well as reporting two of their own in a very well worked up study.[1] They broke the condition down into two large classifications: Class I, Diffuse Eosinophilic Gastroenteritis, and Class II, Circumscribed Eosinophilic Infiltrated Granuloma of the Gastrointestinal Tract. They subdivided Class I, the diffuse type, into three subgroups: A, Polyenteric Type, of which they had 11 patients, B, Monoenteric Type, of which they had two patients, and C, Regional Type, of which they had 13 patients. In the first type more than one portion of the intestinal tract was involved, characteristically the antrum of the stomach with extension into the jejunum and ileum. Grossly the areas were firm, sometimes cartilaginous with an edematous and occasionally a vascular appearance. Sometimes the omentum and mesentery seemed to be inflamed, boggy or fibrotic. The pylorus usually was narrowed. On microscopic the characteristic finding was a diffuse inflammatory infiltration from the submucosa, at times involving the serosa, of sheets of mature eosinophils with occasional macrophages and giant cells, with edamatous areas and occasional muscle hyalinization or necrosis. The mucosa notably was free of involvement and there were no granulomata.

In the monoenteric type the involvement was limited to the stomach. Otherwise the picture was quite similar, and in the regional type the disease tended to involve a particular region, usually prepyloric and pylorus, with ill defined borders. Again, the pathologic picture was similar, but there was more perivascular infiltration and more polymorphonuclears.

The clinical features of the Class I disease as they described it were very similar to those of the cases reported in this paper. Eighty per cent gave a history of recurrent gastrointestinal disorders over a period of one to 25 years, with intermittent episodes of nausea, vomiting, flatulence, diarrhea, epigastric pain, cramps and heart burn. In several there was history of melena or hematemesis, and pyloric obstruction was observed in all of Groups A and B and half of Group C. Also, unexplained cholecystitis and cholelithiasis were noted in six. In half of their Group A and B patients there was significant record of allergy but only a third of Group C gave similar history. The significant laboratory finding was peripheral eosinophilia, which persisted and recurred months to years after treatment. Most of their cases had had surgical treatment.

The x-ray studies usually showed a smooth concentric narrowing of the antrum, suggesting an extrinsic mass or infiltrating carcinoma. Peristalsis in the involved area was absent. There was incomplete pyloric obstruction with retention lasting hours or days. Treatment in 19 was subtotal gastrectomy, in six of which there was difficulty performing the anastomosis. Three had gastroenterostomy, and three cases with recurrence of symptoms after surgery were given ACTH with prompt control of symptoms and eosinophilia. In one of these exploratory laporotomy was done for possible adhesions and there was complete subsidence of the previous findings.

Their Class II, Circumscribed Eosinophilic Infiltrated Granuloma, was divided into two groups: A, Regional Type, 22 cases, and B, Polypoid Type, of which they had 50 cases. These in Group A were circumscribed pseudotumors, were located anywhere in the gastrointestinal tract and on microscopic examination showed a granuloma type of lesion with abundant reticular and fibroblastic proliferating elements. There was no particular eosinophilia. In Group B the findings were similar except that, as indicated by the label, tumors were polypoid. This was the most common group. It is quite apparent that Class II presents a pathologic picture differing from that of Class I, although the clinical picture might be similar. They had abdominal pain and cramping but it was usually more prolonged and not intermittent.

Levrat, et al, reported a case very similar to my first case.[2] That was of a young female who had had similar recurrent attacks of acute abdominal pain with diarrhea, often with melena. On surgical exploration she was found to have allergic jejunitis. The condition was not helped by surgical treatment. Spencer and Dahlin reported another similar case of a patient who at age 28 began having diarrhea associated with epigastric distress and eosinophilia of approximately 20 per cent, reaching as high as 63 per cent on one occasion.[3] At age 40 he was explored and gastric resection was done. The specimen showing characteristic findings of Group I A of Ureles. At that time they found only one other case reported in the literature.[4]

Ruzic[5] in 1952, reported a similar case, except this patient also had Loeffier's Syndrome and because of this it was titled "A Gastric Lesion of Loeffier's Syndrome." This apparently is not a common combination. However, the similarity of the process is readily apparent. Swarts and Young in 1955, also reported two very similar cases, both of which had marked eosinophilia.[6]

The cases reported in this paper can be summarized quite briefly. The significant symptoms mainly were recurrent bouts of abdominal pain with absence of any significant physical findings but with laboratory findings of marked eosinophilia. Both patients had small hiatus hernias and each obtained rapid, complete relief of symptoms with a short course of corticosteroids.

CASE REPORTS

Case 1. A 36-year-old nun was admitted to the hospital December 12, 1962, with history of abdominal pain.

Seven days previously, upper abdominal pain developed, accompanied by nausea, vomiting and diarrhea. With symptomatic treatment there was improvement, but symptoms recurred in a few days. Vomitus was bile-stained at times, would come soon after eating, and was unrelated to type of food. Stools were as frequent as eight a day, and were loose. But no blood or mucous was noted. Pain was persistent, cramping, aggravated by physical activity, and tended to radiate around to the back on the right.

In 1947, in another city, she had similar symptoms and was operated on for acute appendicitis. A subacute appendix was removed. The record also referred vaguely to amebic cysts, for which she was treated. About 1953, at still another city, she developed epigastric distress, nausea, vomiting, diarrhea and severe cramps. She was hospitalized, and improved, but no diagnosis was made. Again in 1956, the same symptoms occurred and she was referred to an internist who studied her thoroughly. The most significant finding was a white count ranging from 9,000 to 14,000 with 20 to 38 per cent eosinophilia. Bromsulfalein retention (BSP) was 26.5 per cent. X-rays indicated marked mucosal edema and ulceration of the jejunum and ileum. This cleared, in six months her BSP was down to 5 per cent and the eosinophilia had subsided. Many other studies were done but results were normal. Treatment with antihistamines seemed to bring improvement. She was well from then until present illness.

Other past history, diet history, and geographic history were non-contributory, except that she had gained 80 pounds in the preceding year. She felt the gain due to compulsive eating associated with nervousness caused by very heavy teaching responsibilities.

She was very obese, weighing 238 pounds, and did not appear to be distressed. Temperature was 98.6 F and findings on examination were normal except for general tenderness of the abdomen, especially in the right upper quadrant.

In spite of history of almost constant vomiting, 450 cc of a dark brown fluid was aspirated from the stomach. White count was 17,500 with 19 per cent eosinophils. It ranged from 10,800 to 18,200 with eosiniphils up to 51 per cent while studies were being made. The BSP retention was 20 per cent. The following tests gave normal results: amylase, serum glutamic-oxalacetic transaminase, prothrombin time, lactic acid dehydrogenase, VDRL, serum bilirubin, cephalin flocculation, serum proteins, calcium, many stools for ova, parasites, and blood, and a skin test for trichinosis.

On December 14, 1962, upper G. I. series showed a sliding hiatus hernia and changes in the first portion of the jejunum of "some thickening irregularity of the mucosa." Colon and chest films were normal.

She ran an afebrile course. Abdominal pain was frequent, requiring meperidine in 100 mg doses for relief. Benadryl had no affect on the symptoms or blood picture. Attempts to intubate the duodenum were unsuccessful, and she found an elimination diet intolerable. Therapeutic trial of a course of quinacrine and of piperazine did not alter the picture. Finally, after 18 days, she was started on 40 mg prednisolone a day. There was rapid improvement with complete relief of symptoms in 24 hours. In five days the white count dropped to 14,150 with 7 per cent eosinophils and BSP retention was 8.8 per cent. Following discharge from the hospital she reported two more attacks. Response to steroids has been gratifying each time.

Case 2. A 56-year-old man was admitted to St. Joseph's Hospital, September 22, 1964, with history of intermittent epigastric pain dating back to 1961. The attack for which he was admitted was more severe and did not respond to antacids, anticholinergics or bland diet. Pain was in the upper abdomen. There was no emesis, jaundice, food intolerance, diarrhea and no history of hypersensitive reaction. In 1960, he had passed a renal stone.

A general physical examination revealed no significant abnormalities, except slight tenderness in the epigastrium. Admission white count was 6,200 with 23 per cent eosinophils. This was repeated and a count of 6,750 was obtained with 37 per cent eosinophils. Total eosinophil count on September 23, was 1,875. Repeated serum amylase studies, stool examination, gastric analysis, as well as studies of the duodenal aspirate for ova and parasites and a trichinella skin test were all negative. Gastrointestinal x-rays prior to this had shown a small hiatus hernia. On the basis of these findings and because of the prior experience with Case 1, the patient was given a short course of prednisolone with a very rapid response and relief of all his symptoms. So far as is known there has been no recurrence.

From these two cases and a brief review of the literature, there appears to be a definite, but uncommon, clinical picture of recurrent attacks of abdominal pain, nausea, vomiting, flatulence, cramps, diarrhea and heart burn, occasionally with melena and hematemesis, findings of pyloric obstruction, infiltration in the stomach and duodenum impairment of bromsulfalein excretion and absence of any other significant laboratory abnormalities except for a marked eoisinophilia. Response to steroids is dramatic. Significance of the finding of small sliding hiatus hernia in the two cases must await further evaluation. The hernias were small. It is conceivable that they have been present in previous cases though not recognized at the time of examination. Any significance in the two cases would seem doubtful, for between attacks both of these patients have felt well. Certainly symptoms in these attacks were not those of hiatus hernia. ■

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chemical nomenclature

generic	trade
meperdine	Demerol
quinacrine	Atabrine
piperazine	Pipizan Antepar
prednisolone	Delta Cortef Hydeltra Metacortelone Metiderm Paracortol Sterolone

abstracto

Se presentan dos casos de infiltración eosinófila idiopática del tracto gastrointestinal del tipo policéntrico difuso, como lo clasifica Ureles. Los dos respondieron dramaticamente a la terapeútica de corticoesteroides y los dos tuvieron hernias deslizantes pequeñas del hiato.

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Vaginal Cytology as a Guide to Prognosis in Threatened Abortion

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When abortion is threatened, therapeutic efforts should be reserved for those likely to proceed to term. It is a waste of time to treat those destined for inevitable abortion. Vaginal cytology offers a way to select those cases most likely to recover and go on to term. In 140 cases of threatened abortion it was possible to distinguish the groups with an accuracy of 97.1 per cent.

Exfoliative vaginal cytology has an important role to play in present-day obstetrics because it reflects the balance of the female hormones, it is simple to perform in the antenatal clinic, does not inconvenience the patient, and does not add an impossible burden to the work of the pathology department.

Endocrine dysfunction is believed to be an occasional cause to abortion. According to Guadefroy, 15 per cent of all pregnancies end in spontaneous abortion, and 6 to 7 per cent are due to endocrine disorders.[1]

In threatened abortion the cervical os is closed, and this stage is characterized by uterine bleeding, usually without contractions. At this point, therapy may prevent abortion occurring but, because of difficulty in differentiating between threatened and inevitable abortion, the results are very uncertain. Indeed, hormone therapy in threatened abortion is a most controversial subject, although some writers, Goldzeichen, for example, found some benefit from progesterone administration, particularly in cases exhibiting a low pregnanediol excretion.[2]

Regarding vaginal smears, Pundel stated that a normal pregnancy cytology pattern was associated with a normal delivery in over 90 per cent of the cases.[3] Abnormal pregnancy smears had, he believed, a bad prognostic significance. In pregnancies that had advanced more than three months, an eosinophilic index of over 50 per cent, in several smears taken at intervals of a few days, predicted a very poor chance of survival.

Ferreira spoke of two cytologic patterns characteristic of abortion. The first was characterized by an increase of over 10 per cent in the pyknotic index, and the second showed in addition a replacement of the superficial and intermediate cells by parabasal and postpartum cells.[4]

Papanicolaou depicted, in his atlas, two cells that he was tempted to call "abortion cells." They preserved the navicular shape but were acidophilic and had a small pyknotic nucleus that showed signs of fading.[5]

In spite of many investigations in the past, the aetiology of spontaneous abortion is in many cases still far from being clear. Hochstaedt et al found a high incidence of endocrine dysfunction, and by comparing two methods of diagnosis they showed that vaginal cytology was a more sensitive test than quantitative assay of chorionic gonadotropin.[6]

material and methods

The main purpose of this study was to establish a line between cases of threatened abortion that had a good prospect of continuing the normal course of pregnancy and those that did not. Cases of threatened abortion between 12 and 20 weeks of pregnancy, and in which no local or general cause could be detected clinically to account for the bleeding, were chosen. Abortion was considered threatened if the cervix was closed, bleeding was not severe and abdominal pain was slight or absent. No case was included in which there was a history of successive abortions. In all the selected cases the size of the uterus corresponded to the period of amenorrhea.

Vaginal smears were collected on admission to hospital and before the start of any treatment. A speculum was used for this purpose and the smears were obtained from the lateral fornix with the use of a wooden spatula. They were stained with Shorr "S_3" stain. The patients were

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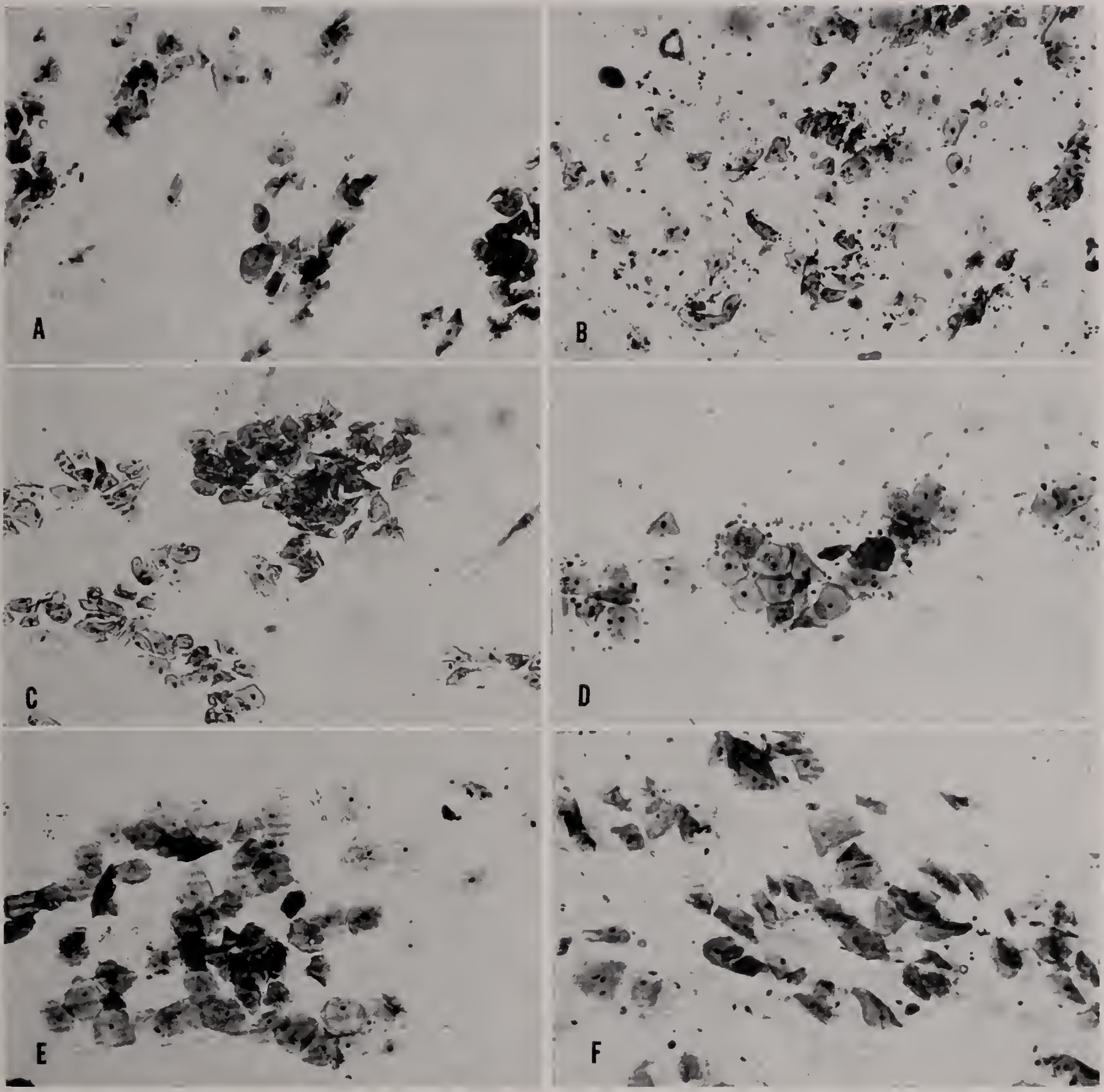

Fig. 1. Characteristic vaginal smears. A—Threatened abortion at 12 weeks. Case continued to term. Note the cell clumps. B—Threatened abortion at 16 weeks. Case continued to term. Note the abundance of navicular cells and the cytolysis in the background. C—Threatened abortion at 18 weeks. Case continued to term. Note the groups of navicular cells and the low pyknosis. D—Threatened abortion at 12 weeks. Case progressed to complete abortion. Note the superficial, flat, discrete cells, with frequent pyknosis. E—Threatened abortion at 14 weeks. Case progressed to inevitable abortion. Uterus was evacuated. Note the very high pyknotic index. F—Threatened abortion at 16 weeks. Case progressed to complete abortion. Note the discrete pyknotic cells with infrequent naviculars.

given bed rest and sedated with phenobarbital; pethidine (Demerol) was added if there was pain. The smears were repeated every three days until the bleeding stopped and the patient was discharged to attend the antenatal clinic.

Patients who continued pregnancy were followed until delivery. Patients whose pregnancies had passed into the inevitable abortion stage had the uterus evacuated under general anaesthesia, and a careful examination was made to exclude any local cause inside the uterus, as septate or bicornuate uterus.

The aborted material was not examined for chromosomal aberrations in spite of the fact that many investigators found such abnormalities in many cases of abortions. It was considered that such an investigation would be outside the scope of this piece of research. The main idea was to prove that the extent of separation of the ovum or placenta from the uterine wall could be reflected by the hormonal level in the body which, in turn, could be determined through study of the vaginal smear. Whether the abortion was due to foetal malformation, or to placental insufficiency there would be no difference in the picture of the smear except to show the extent of hormonal drop and whether the remaining active placental tissue could support the pregnancy through its future course.

results of the study

One-hundred forty cases of threatened abortion were selected for this study. The results were as follows:

In 50 cases, pregnancy continued by simple conservative treatment without the use of any hormonal therapy. In all these cases the favourable prognosis was anticipated because of the normal cytologic findings. In 86 cases the treatment failed and the pregnancy passed into the inevitable abortion stage. In them the cytology had shown abnormal features. In four cases the prediction was wrong. In one case the pregnancy continued to term, although the smears were of the unfavourable group, in the others a spontaneous abortion occurred despite the favourable appearance of the vaginal smears.

A—cytologic results: pregnancy continuing normally

1. *Pyknotic index:*[7] In no case did the number of pyknotic cells exceed 25 per cent of the total cell count. In five cases it varied from 20-25 per cent and in six cases it did not exceed 5 per cent.

2. *Type of cell:* The cells retained their navicular shape with folded margins, but they had less tendency to be arranged in the clumps so characteristic of a normal pregnancy smear. The superficial pyknotic cells with non-curled cellular margins did not account for more than 2 per cent of the whole cellular count.

3. *Background of the smear:* The smear background was dirty, full of Doderlein bacilli, leucocytes and histiocytes. Mucous threads were seen between the groups of cells.

4. *Cytolysis:* This was a constant feature in all the specimens, and did not differ from that of normal pregnancy.

5. *Staining reaction:* Most of the cells took a basophilic stain except for the few superficial pyknotic cells that were acidophilic. With P.A.S. (Periodic acid, Schiff) stain these cells were deep pink in colour due to excessive glycogen deposition in their cytoplasm.

B—cytologic results: abortion became complete

1. *Pyknotic index:* This was variable, but sometimes showed a considerable rise compared with the level encountered in a normal pregnancy smear (that is up to 15 per cent). In 20 cases the number of pyknotic cells exceeded 50 per cent in 16 cases it was between 30-50 per cent, and in 30 cases between 15 and 30 per cent. In 20 cases it was below 15 per cent. Thus in 76.7 per cent of all cases of threatened abortion that did in fact miscarry, the pyknotic index exceeded 15 per cent.

2. *Types of cell:* It was a constant feature in all the specimens from cases of inevitable abortion that the navicular cells were mostly replaced by basophilic intermediate cells, with an increased number of superficial flattened cells amounting to 4 to 6 per cent of the whole cell count. The cells showed less curling of their margins than those found in an ordinary pregnancy smear. They were mostly arranged in small groups with the frequent occurrence of discrete cells of the superficial type.

In 20 cases the appearances were anomalous. There was an infiltration of basal cells that gave the smear an appearance of the post-partum or post-abortive pattern. The pyknotic index varied from 2 to 5 per cent, which was a low level compared to that encountered with inevitable abortions. These signs were taken as an evidence of

Table 1

Type of abortion	Pyknotic index	Type of cell	Cytolysis	Background of smear	Staining reaction
1—Abortion with favourable outcome (50 cases)	Below 25 per cent	Mainly navicular in clumps	Abundant	Debris	Basophilic
2—Abortion with unfavourable outcome (66 cases)	More than 30 per cent in 54 per cent of cases	Intermediate or superficial, discrete	Mild	Fairly clean	Acido- and basophilic
3—Abortion, ovum possibly already dead (20 cases)	2 to 5 per cent	Parabasal and intermediate, discrete	Absent	Clean	basophilic

very low hormonal level and the discrepancy could be explained by assuming that intrauterine death of the ovum had occurred some time before the smear was obtained.

3. *Background of the smear:* In 45 cases the background of the smear was clear with minimal infiltration of leucocytes and bacteria.

4. *Cytolysis:* This was present in eight cases only, while in 78 cases it was mild, although not enough to make the cell count difficult.

5. *Staining reaction:* Eosinophilia was commoner in the cases that showed a high pyknotic index (more than 30 per cent). Those smears that manifested with basal cell infiltration, were basophilic in reaction.

Table 1 summarizes the above results.

discussion

From the preceding results a reasonably constant feature in pregnancies threatening to abort, but that in fact continued, was the persistence of a normal or nearly normal pregnancy smear. An increase of the pyknotic index from 15 per cent (the normal level during pregnancy) to a figure around 25 per cent carries a good prognosis.

From this series, however, one gained the impression that it is the smear pattern that is most important in foretelling whether such a pregnancy has any chance of continuing and whether hormonal treatment should be started as substitution therapy. The persistence of cytolysis, the presence of navicular cells in clumps, the basophilic staining reaction and a reasonably low pyknotic index (below 30 per cent) all are favourable signs in a threatened abortion. These cytological data indicate that the amounts of progesterone and chorionic gonadotropins secreted by the corpus luteum or the placenta are enough to maintain the pregnancy.

In contrast, the vaginal smear in cases of inevitable abortion shows a more or less uniform picture. The discrete arrangement of the cells, the low incidence of navicular cells, the clean background, the absence of cytolysis and the high level of pyknosis are all distinctive features.

A disturbance in hormone levels in some degree at one stage of pregnancy is a frequent finding among those whose pregnancies terminate poorly. Nesbitt observed a low pregnanediol appearing alone or in conjunction with a low titre of chorionic gonadotropins in those who aborted and among those whose pregnancies terminated prematurely. Among 88 patients who threatened to abort, the incidence of urinary hormonal defects was 43.7 per cent when the infant survived, contrasted with 90 per cent when the pregnancy terminated in the death of the foetus.[8] Such finding tends to support our observation of high pyknotic index in cases of threatened abortion passing into the inevitable stage. Progestational domination is considered to be the dominant feature responsible for the low pyknotic index in pregnancy. The low level of chorionic gonadotropins and progesterone allows the effect of oestrogens to dominate. The most useful assessment for evaluation of the chorionic gonadotropins and progesterone in relation with oestrogens is the pyknotic index.

When, however, the ovum has already died, i.e. missed abortion, there is lack of all hormones as evidenced by cell atrophy in the smears.

summary

One-hundred forty cases of threatened abortions were examined. It seemed that a line of demarcation could be drawn between threatened abortion with good prognosis—where hormonal therapy is reasonable—and threatened abortions with poor outlook—where hormonal treatment

is a waste of time. In this differentiation the general smear pattern was the best guide. The pyknotic index, though favoured by some workers, was not found to be particularly reliable. A distinction between the two groups was possible in 97.1 per cent of the cases examined. Cytology offers a rational approach to selection of treatment for threatened abortions. ■

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abstracto

Cuando existe una amenaza de aborto, los esfuerzos terapéuticos serían reservados para esos que probablemente llegaran a término. Es una pérdisa de tiempo tratar aquellos que estan destinados a ser abortos inevitables. Citología vaginal ofrece la vía para seleccionar los casos que mas probablemente recobrarán e irán a término. En 140 casos de amenaza de aborto fue posible distinguir los grupos con una certeza del 97.1 por ciento.

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Measure of Competence

Our present methods of determining competence, by means of licensure and specialty board examinations, leave much to be desired. It is inconceivable that the average skilled specialist is less competent to care for patients after 5 years of active practice than he was when he took his board examinations just after residency training. However, the conclusion that he is less competent is in fact what present examination records suggest, because the physician steadily loses ability to pass speciality board examinations in the years following training. The Ad Hoc Committee interprets this to mean that the examinations measure primarily the ability to recall facts, and do not measure adequately judgment, skills, maturity, and the ability to find and use facts from source material—qualities that should be enhanced with experience.

The Report of the Ad Hoc Committee (Willord) on
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General Anesthesia for Bronchoscopy

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Bronchoscopy is accomplished more easily and more rapidly under general anesthesia. The patient and the surgeon are relaxed, and the team is in position to function immediately, should emergency arise. Most important advantage is the level at which oxygen saturation can be maintained.

In 750 consecutive bronchoscopic examinations over a period of ten years, there were no deaths and only infrequent complications. All were done under general anesthesia, usually administered by one of us, (PCK) and all done by one surgeon (FRS). Safety of the method has been demonstrated clinically. This report concerns studies of arterial and venous oxygen saturation.

With the increased supply of well trained bronchoscopists and the realization that once a cancer of the lung has grown to a size sufficient to remove a specimen, the salvage rate at surgery is very low, the indications for bronchoscopy have changed. In this series there was a 2 per cent incidence for the removal of foreign bodies, 25 per cent were bronchial washings with or without biopsy for the detection of cancer, 50 per cent were for culture and drug sensitivity for acute or chronic lung conditions, and the remainder for treatment of post operative atelectatic conditions.

advantages

Under general anesthesia the patient is completely relaxed and offers no resistance to repeated examinations. Elimination of fear and apprehension eliminates increased oxygen requirements resulting from tension. Examination is facilitated and visualization is superb. Arterial and venous saturation can be maintained at safe levels. The anesthesiologist, already participating, is available should teamwork be required for resuscitative measures.

Extra oxygen, made available under general anesthesia, may well prevent cardiac arrest during tracheo-bronchial aspiration.[1,2] Heart muscle uses at least 75 per cent of the oxygen brought to it. Blood from the coronary veins is much lower in oxygen content than that from systemic veins. Under some conditions the demand may exceed the supply when the patient is breathing 20 per cent oxygen, i.e. air.

Patrick's editorial comes to mind, "diagnostic procedures are often prolonged, and being without the paramount interests of the major surgical procedures, are often delegated to the least trained of the anesthesia staff."[3] Add to this the oldest apparatus, the usual isolation of endoscopic rooms and we are confronted with imminent catastrophe. This merely reiterates the old saying, "There is no such thing as a minor anesthetic procedure."

physiologic considerations

In recent literature on anesthesia, several articles have appeared that are of interest to physicians concerned with oxygenation of the surgical patient.

Pierce and Garofalo confirmed that it is possible to have dangerous arterial hypoxia in the premedicated surgical patient with normal values for blood pH and Pco_2 levels.[4] Their findings confirm the validity of our own dependence on arterial and venous oxygen values.

Fijumori and Virtue, working with mongrel dogs, have established that pre-apneic hyperventilation with air for 30 seconds, permits 285 seconds of safe apnea, as compared with 750 seconds after hyperventilation with oxygen for 30 seconds. Extending the oxygenation time to 30 minutes did not significantly extend the safe period of apnea as judged by the isoelectric EEG.[5]

Downes et al, working with patients undergoing pulmonary surgery have shown that pre-apneic oxygenation is of great clinical usefulness.[6] Drug induced apnea of 60 seconds was produced and the arterial oxygen saturation fell only from 99 per cent to 93 per cent. Addition of endotracheal suction at 13 liters per minute, (roughly equivalent to a vacuum of 80 centimeters of water) for this period of apnea only lowered the arterial saturation to 92 per cent. They believe that below 90 to 92 severe arterial hypoxia may occur rapidly. When apnea was

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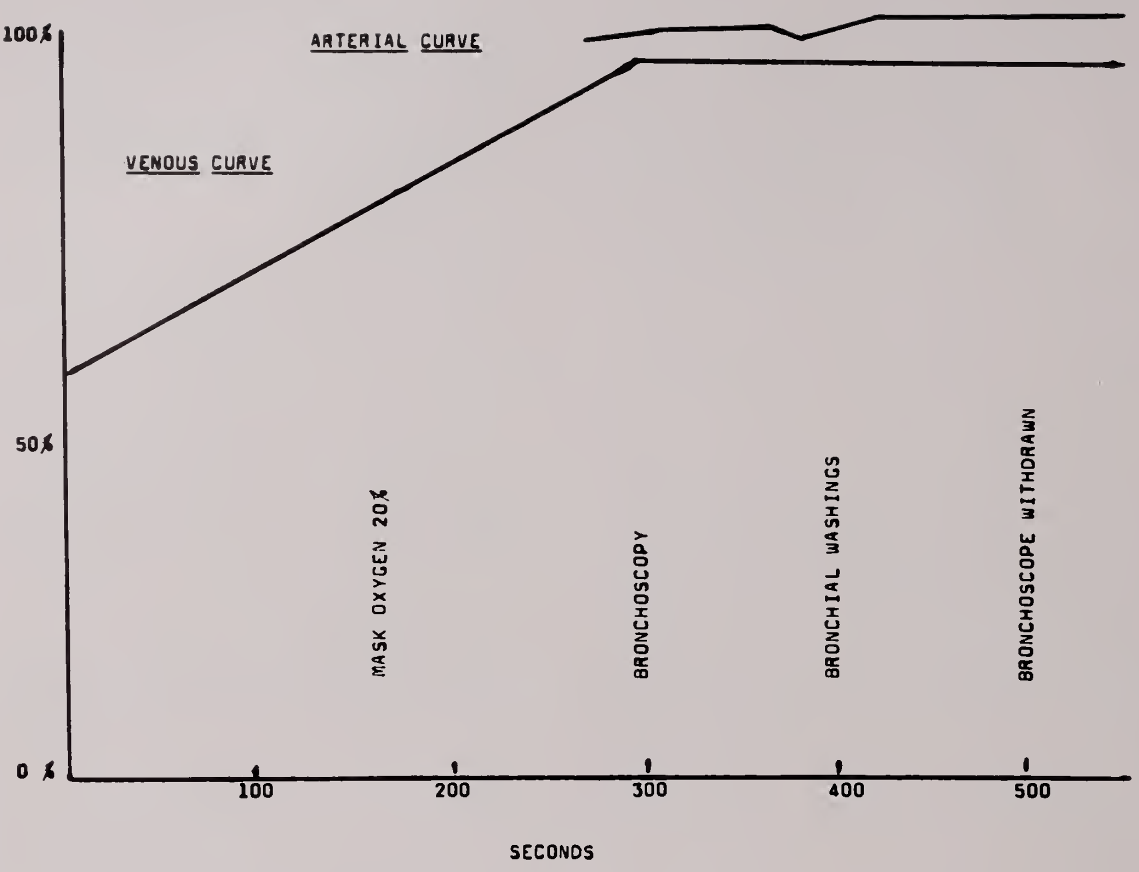
Read before the Washingotn State Society of Anesthesiologists at Lake Chelan, June 11, 1966.



Composite of all the arterial oxygen studies.

repeated with the pleura opened, values to 86 per cent were obtained. When the pleura was opened and endotracheal suction used, the fall was to 82 per cent, both values being extremely hazardous to the patient. All of these values stayed at 100 per cent after pretreatment by hyperventilation for 15 seconds using oxygen.

This study is concerned with the minute-by-minute arterial oxygen saturations of patients undergoing bronchoscopy and, incidentally, occasional venous saturations. As a bonus of this study we have determined that the color of the blood is an extremely reliable index to actual oxygen saturation.

One of the patients developed bronchospasm during the operative procedure. Arterial blood samples taken during the two minutes preceding the intravenous use of theophylline ethylenediamine were low in oxygen saturation. The study also confirmed the effectiveness of theophylline ethylenediamine in treatment of bronchospasm.

technique

Pre-operatively these patients were not heavily premedicated. Only the extremely apprehensive patient received a preoperative barbiturate. All patients received 75 to 100 mg meperidine hydrochloride intramuscularly about one hour before induction. Atropine sulfate, 0.24 mg, was administered intravenously in the surgery a few moments before the induction dose of thiopental sodium. The reason for this approach to premedication is the extreme importance of the atropine sulfate in all cases receiving succinylcholine, coupled with the extreme unreliability of predictions about actual operating time for each patient. A worn off sedative or narcotic is merely annoying, but with the rarely seen vagal depression caused by succinylcholine, worn off atropine is dangerous.

An induction dose of barbiturate was followed by 80 per cent nitrous oxide, and 20 per cent oxygen under no more than one centimeter water pressure until the femoral artery had been cannulated and the base line blood sample drawn. This was followed by high flow rate of 98 per cent oxygen with 2 per cent halothane for 5 to 7 minutes. This method is similar to that used by Frumin when studying oxygen saturation after apnea for denitrogenating patients.[7] Succinylcholine chloride was slowly given in a 0.1 per cent solution during this period, to provide optimal muscular relaxation for the examination. (Higher concentrations are known to have greater vagal depressive effects.) In about half of the cases the relaxing dose was also the apneic dose of the drug. Blood samples were drawn about every 60 seconds, unless something of importance was occurring, and then blood was drawn about every 30 seconds. During the last half of the study lidocaine 2 per cent was used as a cough suppressant as recommended by Steinhaus.[8] It was found 200 mg of lidocaine was enough so that, if given a moment before the insertion of the bronchoscope, there was no coughing during the examination or with the tracheal washings. This led us to incorporate lidocaine with the anesthetic technique for bronchograms, a method to be reported later. Naturally, the operator is happier when there is no sputum rushing past his ear when he passes the bronchoscope between the vocal cords.

The instrument used is a Negus bronchoscope to which has been soldered a 12 gauge delivery tube, capable of carrying in excess of 20 liters of oxygen a minute at 40 pounds pressure. Ten centimeters from the distal tip is an orifice of sufficient size to allow the passage of one third of the total gas flow. This orifice assures that when the tip of the scope is buried deep within a lung incapable of gaseous diffusion, the "good" side of the lung will be properly oxygenated. We feel that this has been most helpful in examining those patients with one badly diseased lung.

As soon as the scope is past the cords, 100 per cent oxygen is delivered through the sidearm. No anesthetic vapors are added to the sidearm. Visual distortion, like heat waves seen when driving along a hot road, may confuse the operator, and his exposure to possible soporific effects must be considered.

With the umbilical cord of oxygen conduit connecting the anesthetist with his patient, all is secure. Should the need arise, the operator can inflate the chest by occluding the open end of the scope with his finger, or if the operator is busy with his light source, an alcohol sponge held over the end of the scope by an unscrubbed member of the team will suffice. The anesthesiologist must monitor the pulse continually, not because of hypoxia, but because vagal effects of the succinylcholine chloride can be fatal if unnoticed and uncorrected. If the slowing of the cardiac rate and weakening of the amplitude of the myocardial contraction does occur with the muscular relaxant, the action is insidious, but is readily detected through continual monitoring of the pulse. This condition is treated with 0.24 mg atropine sulphate intravenously. If bradycardia persists, control is resumed by the anesthesiologist, who institutes hyperventilation with a bag and mask.

Completion of the surgical procedure, requiring one and one-half to two and one-half minutes, is the cue for the anesthesiologist to start helping the patient return to consciousness. This is a matter of perhaps 5 minutes, during which time oxygen is given through a nasal catheter and there is intermittent suction to remove secretions from the posterior pharynx.

As a matter of protection to the surgical team, all bronchoscopic examinations are treated as if there were some acute contagious infection present. Double masks are worn throughout the procedure and discarded only when contact with the patient has ended. Frequently the entire team is gowned and gloved. Hand washing is required of each team member. Any part of the anesthetic apparatus capable of carrying infection is sterilized. A bag and mask, without cannister, is the simplest apparatus to keep sterile. Short duration of anesthesia, and high rate of gas flow, obviate any danger of carbon dioxide excess.

Oxygen saturations were determined by the spectrophotometric method of Nahas, using the Nahas-Waters lucite curvette with a Beckman DU spectrophotometer.[9] This method has shown excellent agreement with the classic Van Slyke manometric method. Blood was collected into iced, sterile 10 cc glass syringes containing 0.25 cc each of liquid mercury and sodium heparinate. Samples were stable for up to five hours. Venous blood samples were drawn a few hours prior to surgery, and within 24 hours after the procedure. These samples ran a uniform 70 per cent saturation. Venous samples taken after the high flows of oxygen for five minutes, and all samples taken during the bronchoscopic examination, ranged from 88 per cent to 93 per cent saturated.

These venous values are the safety factor in this technique. The difference between 70 per cent saturation with air and 88 plus per cent with oxygen means that plasma is carrying enough reserve oxygen to meet requirements, should there be any interference with respiratory exchange during the operative procedure.

conclusion

General anesthesia for bronchoscopic examination is the safest method. There are other advantages: the patient is relaxed and oxygen requirements are minimal; the operator is not fighting the patient, and a rapid, thorough examination is easily carried out; there is greater safety to the operator when he has a non-coughing patient; and there is a trained team usually available for any thoracic emergency.

Hyperventilation of the patient for even 15 seconds with oxygen assures arterial oxygen levels at 100 per cent for several minutes of apnea. Lidocaine in dosages of 200 mg is very effective for cough suppression. Endotracheal suction, at 80 cm of water, does not appreciably lower the arterial oxygen saturation in the apneic patient. ■

7444 W. Mercer Way (98040)
(Dr. Kundahl)

chemical nomenclature

generic	trade
lidocoine	Xylocoine
meperidine HC1	Demerol
theophylline ethylenediamine	Aminophylline
thiopentol	Pentothol
holothone	Fluothone
succinylcholine	Anectine Quelicin Sucostrin

abstracto

Broncoscopía es llevada a cabo más fácilmente y rápidamente bajo anestesia general. El paciente y el cirujano están relajados, y el equipo está en posición de funcionar inmediatamente si una emergencia surgiera. La más importante ventaja es el nivel al cual la saturación de oxígeno puede ser mantenida.

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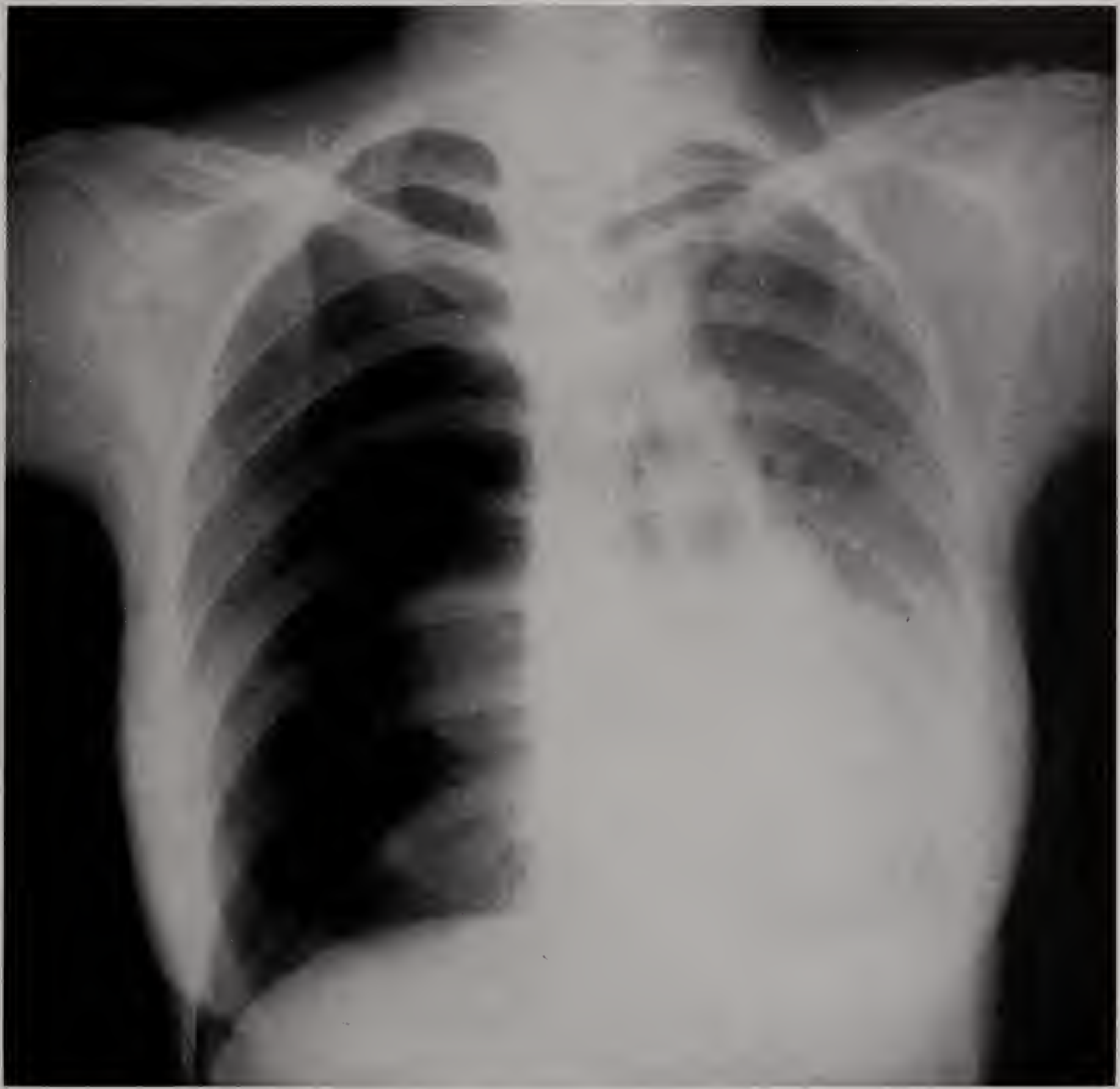
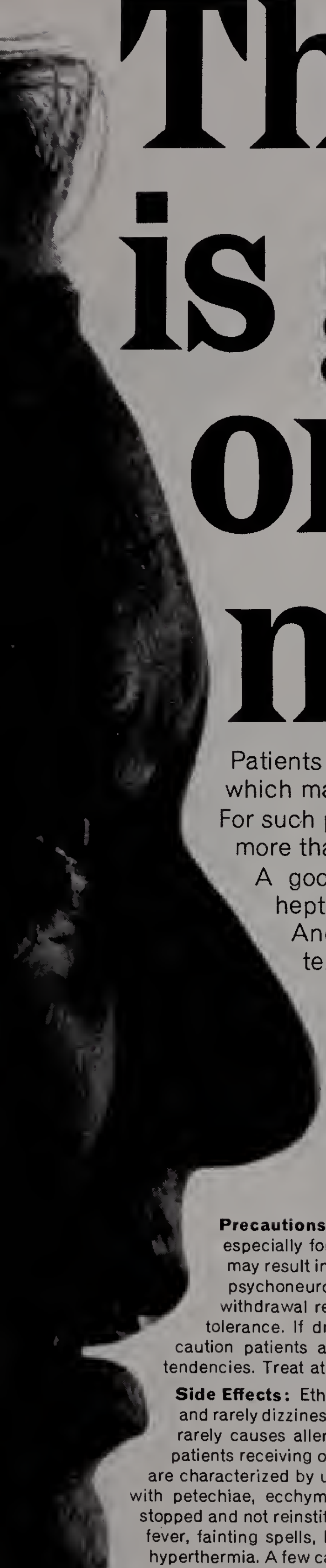
9 Nahas, G. G., A simplified lucite curvette for the spectrophotometric measurement of hemoglobin and oxyhemoglobin. Jour Applied Physiology 13:147-152 (July) 1958.

X-Ray of the Month



This 24-year-old female was admitted to the hospital with a history of sudden right chest pain and progressing dyspnea. There was no history of cough, hemoptysis or weight loss. Examination revealed percussion hyperresonance on the right and dullness on the left. Breath sounds were decreased on the right. Temperature was normal.

see page 399



This pain is getting on my nerves.

Patients in pain often experience concomitant anxiety and tension, which may add to the burden of pain.

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Precautions: Keep out of reach of children. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. Give cautiously to patients with suicidal tendencies. Treat attempted suicide with immediate gastric lavage and appropriate supportive therapy.

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness and CNS depression. Overdosage may result in salicylate intoxication. Meprobamate rarely causes allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioedema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

Wyeth Laboratories Philadelphia, Pa.

OREGON

Oregon Medical Association—2164 S. W. PARK PLACE, Portland, Oregon 97205

PRESIDENT *John E. Tysell, M.D., Eugene*
SECY.-TREAS. *Alfred C. Hutchinson, M.D., Portland*
EXECUTIVE SECRETARY *Mr. Roscoe Miller, Portland*
Annual Meeting Sept. 19-23

Senior Medical Student Banquet

Good food and good fellowship were the order of the evening at the Senior Medical Student Banquet, Friday, March 10, at the University Club, Portland. The event was sponsored by the Oregon Medical Association. In photo above, Mr. Robert O. Bissell, Associate Executive Secretary, Oregon Medical Association, is seated with Mrs. Dan Brown, Mr. Dan Brown, and Mr. Sam East.

Head table lineup at the Senior Medical Student Banquet included, left to right, John E. Tysell, OMA President; M. Roberts Grover, Director of Continuing Medical Education at the University of Oregon Medical School; Donald H. Williams, guest speaker from University of British Columbia Faculty of Medicine; and Herman A. Dickel, Chairman of the Banquet.

Six Named to AMA Groups

The announcement of six reappointments of Oregon physicians to council and committees of the AMA was made recently. Norman A. David, Portland, to the Council on Drugs; Ernest T. Livingstone, Portland, to the Council on Legislative Activities; William C. Scott, Portland, to the Committee on Blood; Raymond R. Suskind, Portland, to the Subcommittee on Skin; Donald B. Slocum, Eugene, as chairman of the Committee on Medical Aspects of Sports; and Raymond M. McKeown, Coos Bay, as chairman of the Committee on Rating of Mental and Physical Impairment.

Dillehunt Memorial Lectures Scheduled

The Dillehunt Memorial Lectures will be held at the Shriners' Hospital for Crippled Children, Portland, June 3, 1967. Multiple papers will be given on children's orthopedics.

Guest lecturer will be Carl E. Badgley, Professor of Orthopedics at the University of Michigan Medical School.

All who have an interest in children's orthopedics are welcome to attend. Contact Richard C. Zimmerman, M.D., at the Shriners' Hospital, 8200 N.E. Sandy Boulevard, Portland 97220.

Oregon Legislature Notes Centennial

House Resolution Adopted March 3, 1967

Sponsored by Representatives Carrol Howe, M.D., Fritzi Chuinard, Morris Crothers, M.D., Robert Packwood, and Robert Smith.

Whereas the first formal class in medical education in Oregon was held in the newly formed medical Department of Willamette University on March 3, 1867, exactly one-hundred years ago today; and

Whereas this medical department and medical teaching was the result of the desires and efforts of the medical profession to increase health care for the citizens of Oregon by training of more physicians and to make this training available locally; and

Whereas the Willamette Medical Department was the third medical school established in the West; and

Whereas J. H. Wythe, M.D., President of Willamette University, and Horace Carpenter, M.D., Dean of the Medical Department, were the leaders in this effort; and

Whereas the Medical Department of Willamette University later merged with the University of Oregon Medical School in Portland to provide, through the ensuing century, an increasing quality of medical instruction and to graduate to date 3,555 Doctors of Medicine to serve Oregon and this nation; now, therefore,

Be It Resolved by the House of Representatives of the State of Oregon:

That, on this third day of March, 1967, it express its gratitude for those pioneer medical teachers who founded the Medical Department of Willamette University and the University of Oregon Medical School, and for the efforts of all of those who through the succeeding years have had a part in developing the University of Oregon Medical School into one of the world's finest medical institutions.

Prayer offered in Senate by Rep. Morris K. Crothers, M.D.

Almighty and most gracious God and Father of us all, giver of life and wisdom, we beseech Thee to grant to us wisdom in our deliberations and a constant unflagging awareness of our responsibilities to our state who have placed their trust in us.

We commemorate today a century of medical education in our state which began at Willamette University and has been for many years generously supported by the people of this state through their elected Legislative Assembly. We give thanks for the distinguished heritage of the past in this state in this vital endeavor. We beseech Thy blessing on all to whom has been entrusted the ministry of healing. Grant to all of them, from the most junior student of nursing to the most senior physician, devotion to duty, compassion for the suffering, deftness of hand, clarity of mind and the tenderness and humility so necessary to comforting and healing the sick.

This we ask in Thy most holy body and precious name.

Prayer offered in Senate by Verne Miller, M.D., Mayor of Salem

Almighty God, it seems fitting and proper that we should thus recognize and note the one-hundredth anniversary of medical education in the State of Oregon. We give thanks for those brave people who settled this then-remote land, and one-hundred and twenty-five years ago laid the foundation for Willamette Universtiy. We are grateful for those who caused to be established a school of medicine in this University, one-hundred years ago, and for the faculty and students who heeded Thy command, "Know ye the things of God," and turned this knowledge to the betterment of mankind. We give thanks for those who combined this school with a great state university medical school. Accept also our thankfulness for all who contributed to the success of medical education in our state, and for the encouragement and support given generously over the years by the leaders and the Legislatures of Oregon. We invoke Thy providence on those whose responsibility it is to see to it that distinguished progress in medical education is continued. We beseech Thy blessings on all throughout the world who struggle for education, enlightenment, justice and peace for mankind, and, finally, we ask Thy grace, for those here present, that they may, with wisdom and courage, enact laws that will promote justice, and improve the environment of the people of Oregon. O, God, our help in ages past, our hope in days to come, grant us Thy peace. Amen.

Oregon News continued on page 375

OMPAC

JOHN E. TYSELL, M.D.

An increasing number of physicians in Oregon, as well as in the nation, are taking a healthy interest in political action. These physicians are not motivated by self-interest alone, *but by a genuine interest to be good citizens.*

As doctors we must honestly say that our communities have treated us well, perhaps at times better than we have deserved. It would be incredible if we did not feel an obligation to maintain, improve, and perpetuate a free democratic society for our children.

We in Oregon are proud of Blair Henningsgaard of Astoria, the new national chairman of AMPAC. It is interesting to note that in 1961 during Blair's term as president of OMA, Max Parrott of Portland was chosen as the first chairman of OMPAC. We are equally proud that Max is now a Trustee of the American Medical Association.

As second chairman of OMPAC, Larry Hagmeier of Portland has just completed two full terms, the legal maximum. Under his leadership OMPAC has matured and become one of the most vital and rapidly growing PAC's in the nation. It is a political fact of life in Oregon.

Now, at the annual February meeting at Salishan, Merle Pennington of Sherwood has been elected third chairman of OMPAC. The Board could not have made a better choice. He has shown leadership in his component society, in the OMA, and the Oregon Academy of General Practice. He is a distinguished medical citizen in his hometown and was named Oregon's Doctor-Citizen of the Year for 1966.

Merle is an aggressive leader and a good organizer. He has told me that one of his major efforts will be to maintain and improve the mechanisms of democratic decision-making in the PAC movement. No effort will be spared to develop and promote policies which truly reflect the best convictions of its members.

If you belong to the OMA you belong in OMPAC. Those of us who are asked to go to Salem to testify on medical matters and to fight your legislative battles are deeply grateful for the friends that members of OMPAC have helped to make for us. We could use a few more. ■

John E. Tysell M.D.

BLAIR J. HENNINSGAARD, M.D.

MAX H. PARROTT, M.D.

C. H. "LARRY" HAGMEIER, M.D.

MERLE PENNINGTON, M.D.

continued from page 373

Dr. West Receives Honorary Membership

Edward S. West, Ph.D., proudly displays plaque acknowledging honorary membership in the Oregon Medical Association, to John E. Tysell, M.D., President, Melvin W. Breese, Chairman of the Council on Medical Education, and Herman A. Dickel, Chairman of the recent Senior Medical Student Banquet.

Annual Meeting In September

The 1967 Annual Meeting of the Oregon Medical Association will be September 19-23 at the Memorial Coliseum, Portland. The 1968 Meeting will be October 1-5, the 1969 Meeting September 23-27, and the 1970 Meeting September 22-26.

BOOKS

RECEIVED: The following books have been received. Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

Alcohol and food in health and disease. By Giorgio Lolli et al. Editor, Edward M. Weyer. 787-882 pp. n.p. New York Academy of Sciences, 1966.

Interdisciplinary investigation of mucus production and transport. By S. Jakowska et all. Editor, Edward M. Weyer. Price $4. New York Academy of Sciences, 1966.

Axenic cultures and defined media. By J. D. Tiner et al. Editor, Edward M. Weyer. Price $8. New York, Academy of Sciences, 1966.

Mass spectroscopy of organometallic compounds. By Theodore L. Brown et al. Editor, Edward M. Weyer. 97-121 pp. Illustrated. Price $2. New York Academy of Sciences, 1966.

Reversible inactivation of L-amino acid oxidase at low pH; effect of chloride ion at pH 6.25. By Frederick R. Duke. Editor, Edward M. Weyer. 123-130 pp. Price $1. New York Academy of Sciences, 1966.

Selected hematological and biochemical tests performed with blood and serum of adult rainbow trout (salmo gairdneri) with a high incidence of hepatoma. By S. F. Neieszko et al. Editor, Edward M. Weyer. 101-210 pp. Illustrated. Price $2. New York Academy of Sciences, 1966.

Tumor formation in Swiss mice with human cancer filtrate. By Jayasree Roy Chowdhury. Editor, Edward M. Weyer. 259-274 pp. n.p. New York Academy of Sciences, 1966.

Biological membranes; recent progress. By W. R. Loewenstein et al. Editor, Edward M. Weyer. 403-1048 pp. Illustrated. Price $12. New York Academy of Sciences, 1966.

Biology of human variation. By S. Abraham et al. Editor, Edward M. Weyer. 497-1066 pp. Illustrated. n.p. New York Academy of Sciences, 1966.

Human development. Edited by Frank Falkner, M.D., M.R.C.P., Professor and Chairman, Department of Pediatrics, University of Louisville School of Medicine; Chief of Staff, Children's Hospital, Louisville, Kentucky; Coordinator, Centre International de l'Enfance Growth Studies. 644 pp. Illustrated. Price $20. W. B. Saunders Company, Philadelphia and London, 1966.

Mercenene; growth-inhibiting agent of mercenaria extract-further chemical and biological characterization. By M. Rosarii Schmeer. Editor, Edward M. Weyer. 211-218 pp. Illustrated. Price $1.50. New York Academy of Sciences, 1966.

A manual of tropical medicine, fourth edition. By George W. Hunter, III, Ph.D., Col. U.S.A. (Ret.), Lecturer, Microbiology and Biological Sciences, College of Medicine, University of Florida, Gainesville, Florida; Formerly, Resident Coordinator of LSU-ICMRT and Research Professor of Medical Parasitology, Department of Tropical Medicine and Medical Parasitology, Louisiana State University, School of Medicine, New Orleans; Medical Advisory Council, Colonial Research Institute, Grand Bahama Island; Chief, Section of Parasitology—entomology, Fourth Army Area Medical Laboratory, Fort Sam Houston, Texas; Professor of Parasitology, Affiliated Units of the Graduate School, Baylor University; and William W. Frye, Ph.D., M.D., Sc.D. (Hon.), Professor of Tropical Medicine, Director of LSU International Research and Training Programs in Tropical Medicine; Chancellor, Louisiana State University Medical Center, New Orleans; Senior Visiting Physician, Charity Hospital of Louisiana; Member, Commission on Enteric Infections, Armed Forces Epidemiological Board; Formerly, Chairman, presently Member, Tropical Medicine and Parasitology Study Section, U.S. Public Health Service; and J. Clyde Swartzwelder, Ph.D., Professor of Medical Parasitology and Head of Department of Tropical Medicine and Medical Parasitology; Co-Director LSU International Research and Training Programs in Tropical Medicine, Louisiana State University, School of Medicine, New Orleans; Consultant in Parasitology, Veterans Administration Hospital; Visiting Scientist, Charity Hospital of Louisiana, New Orleans; Formerly, Cheif (Major, AUS), Field Survey Branch, Tropical Disease Control Division, Office of the Surgeon General, U.S. Army. 931 pp. Illustrated. Price $18.50. W. B. Saunders Company, Philadelphia and London, 1966.

Clinical management of behavior disorders in children, third edition. By Harry Bakwin, M.D., Professor of Clinical Pediatrics, New York University; Visiting Physician, Bellevue Hospital; and Ruth Morris Bakwin, M.D., Professor of Clinical Pediatrics, New York University; Visiting Physician, Bellevue Hospital; Director Emeritus, Department of Pediatrics, New York Infirmary. 652 pp. Illustrated. Price $14.50. W. B. Saunders Company, Philadelphia and London, 1966.

Culture, race, climate and eye disease. An introduction to the study of geographical ophthalmology. By Ida Mann, C.B.E., M.A., Oxon, D.Sc., M.B., B.S.Lond., F.R.C.S.Eng., F.R.A.C.S., Western Australian Fellow, Ophthalmic Research Institute of Australia, Perth. 580 pp. Illustrated. Price $21. Charles C Thomas, Springfield, Ill., 1966.

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if she just
doesn't care?

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And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

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*Multiple of adult Minimum Daily Requirement supplied.

†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing life experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Merrell

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We'd also like to send you (to make your wife's menu planning easier, and your meals more delicious), our free 24-page booklet, "WINE COOKERY—THE EASY WAY."

Just drop us a note for these two free booklets. And here's a California toast to your own health, Doctor, with wine... *"¡Salud!"*

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WASHINGTON

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Annual meeting, September 10-13, 1967, Seattle

Nobel Prize Winner to Speak at Annual Meeting

JOSHUA LEDERBERG, PH.D.

Joshua Lederberg, Ph.D., has accepted an invitation to speak during the General Scientific Session of the Annual Meeting, September 10-13, 1967, in Seattle. He received the Nobel Prize (Medicine or Physiology) in 1958 for studies on organization of the genetic material in bacteria.

Dr. Lederberg received his Ph.D. degree from Yale University in 1947. At the present time, he is Professor of Genetics and Biology and Executive Head, Department of Genetics, Stanford University. Dr. Lederberg also is Director of the Kennedy Laboratories for Molecular Medicine.

Three other guest speakers had accepted invitations to attend the Annual Meeting as of mid-March. Additional guest speakers will be confirmed shortly.

Guest Speaker confirmed for the Ophthalmology Scientific Session is Arthur Jampolsky, Director, Smith-Kettlewell Institute of Visual Sciences, and Chief, Department of Ophthalmology, Presbyterian Medical Center, San Francisco. J. Lynwood Herrington, Jr., M.D., Edward Eve Clinic, Nashville, Tennessee, has been selected as guest speaker for the Surgery Program. Guest Speaker for the Psychiatric Scientific Program is Judd Marmor, M.D., Director of the Division of Psychiatry, Cedars-Sinai Medical Center and Clinical Professor of Psychiatry, University of California, Los Angeles.

Four Physicians in AMA Posts

The AMA has announced one new appointment and three reappointments of Washington physicians to its councils and committees. The new appointment went to Clement A. Finch, Seattle, as consultant to the Committee on Blood.

Reappointed were Robert A. Aldrich, Seattle, to the Council on Foods and Nutrition; William D. Norwood, Richland, to the Council on Occupational Health; and as chairman of the Committee on Occupational Toxicology of the Council on Occupational Health; and Louis E. Dewey, Richland, to the Council on Rural Health.

Special Course June 15-17

A special three-day course, Marriage, Family, and Human Sexuality, will be presented June 15-17 at the University of Washington School of Medicine. It is sponsored by the University School of Psychiatry, Obstetrics and Gynecology, and School of Medicine, and the division of Continuing Medical Education.

Tuition is $50, payable to the University of Washington.

Other courses scheduled are: Hematology, May 11-12, and American College of Physicians, May 15-20.

continued on page 382

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LUCIUS D. HILL, III, M.D.

PRESIDENT'S page

Reflection On 40th Legislative Session

At the time of this writing, the 40th Legislative Session is drawing to a close. Of the 1,600 bills presented during the Session, a grand total of some 140 separate measures were related directly or indirectly to health. Of these 140, 24 have passed both Houses and are on the Governor's desk for signature. The Washington State Medical Association supported nearly all of these bills, vigorously opposing only one of them. Technically speaking, during the Special Session any measure that has been presented during the Regular Session may be brought up again. Traditionally, however, only bills that have come out of Committees of either House or Senate are considered viable.

Especially noteworthy bills that have passed are the Washington Clean Air Act which is hailed as a model for air pollution control for the country, Senate Bill 156 which includes a voluntary PKU program and relates also to the Governor's program for measles immunization, House Bill 353 which lists LSD as a dangerous drug and sets up measures to control the use of this drug, House Bill 76 which licenses child care agencies and facilitates adoption procedures along with upgrading the care of children in these agencies, and House Bill 701 establishing guidelines for implementation of Title XIX of Medicare. Other bills passing the Legislature range from services to the blind and upgrading of health insurance to improved driver education.

Looking over the total score, one can see that the individual citizen will derive many health benefits as a result of this legislative session. However, several bills, vigorously supported by the Association, failed to pass. Of particular importance is the Animal Care Act which, in essence, upgrades animal care and facilitates research. Fortunately, this bill did not fail entirely but was referred to an interim study committee which will investigate the entire area of animal pound inspection, certification of research animals and regulation of their laboratory use. Another important measure referred to an interim study committee was the Medical Examiners legislation, particularly, House Bill 460.

The problem of remaining informed and active in the area of health legislation requires an enormous amount of time and effort on the part of your Association. Mr. Harlan Knudson, director of our Division of Government Affairs, has done an outstanding job, working endless hours not only to keep the Association informed on health measures but to inform legislators as well. Many members of WSMA have participated in hearings and contacted representatives to obtain favorable action on health bills. Drs. Adams and Humiston performed admirably in the House, commanding great respect from both Houses for their objective, non-partisan views.

With the closing of the 40th Legislative Session, it is clear that the Association's efforts have been both effective and important in giving the membership a voice in the kind of health legislation that we will be living with in the next biennium. ■

Lucius Hill M.D.

continued from page 379

Annual Meeting of Tacoma Surgical Club Near

RENE' MENGUY, M.D.

HENRY N. HARKINS, M.D.

Annual Meeting of Tacoma Surgical Club will be held Saturday, May 6, at Jackson Hall, Tacoma General Hospital. Anatomical dissections will be demonstrated during the forenoon, starting at 9:30, and papers will be presented in the afternoon session. Banquet, Saturday evening, will be in the Bayview Room of the Winthrop Hotel. Guest speaker is René Menguy, Professor of Surgery at Chicago Medical School. He will present a paper during the afternoon session and give the lecture at the banquet.

Henry N. Harkins, Professor of Surgery at the University of Washington School of Medicine, will discuss the dissections as part of the afternoon program. Thirty-one members of the club will present 17 dissections and demonstrations during the morning session.

Rising Recognition

Acting on recommendations of his many friends in Alaska, Hawaii, Boston, London, Stockholm, Afghanistan and Texas, the British Royal Sourdough Society of Antigua, BWI, has elected Hilding H. Olson, of Seattle, to full membership. This recognition is reported to be the culmination of a long, and sometimes trying, investigation of qualifications and aptitudes. Dr. Olson is, no doubt, happy to see the investigation come to an end.

Dr. Van Arsdel Elected

Paul P. VanArsdel, Jr., Seattle, has been elected Secretary of the American Academy of Allergy.

His new appointment came at the Academy's 23rd Annual Meeting, at the Holiday Inn-Riviera Hotel in Palm Springs, California, February 20-22, 1967.

Academy of General Practice to Meet

The Washington Academy of General Practice will hold its annual meeting May 26 and 27, at the Olympic Hotel. The title is Teenage Topics.

PROGRAM

May 26

9:10 *Menstrual Problems of Adolescence*
James Warren, M.D., Kansas University
9:55 Exhibits
10:25 *Glands and Growth*
John Bakke, M.D., Seattle
11:10 *Strains and Sprains—Cracks and Back*
Lynn Litton, M.D., Missouri University
1:00 *Sexual Advice To Teenagers and Parents*
Robert Rutherford, M.D., Seattle
2:00 *Dependency, Depression, Delinquency, Drugs*
Stewart Finch, M.D., Michigan University
3:00 Exhibits
3:30 *Dependency, Depression, Delinquency, Drugs* (Continued)
4:15 Panel—All Speakers
Edward H. Rynearson, M.D., Mayo Clinic, Moderator

May 27

9:10 *Aantibiotics 1967*
David Perry, M.D., Seattle
9:55 Exhibits
10:25 *Obesity*
Edward H. Rynearson, M.D., Mayo Clinic
11:10 *Contraception 1967*
Walter Keifer, M.D., Seattle

Scientific Exhibit Entries

Physicians who have requested applications for Scientific Exhibit space for the WSMA Annual Meeting are urged to return the completed application to John D. Allen, M.D., Chairman, Scientific Exhibit Committee as soon as possible. The completed application should be mailed to Dr. Allen at the WSMA Central Office, 444 N.E. Ravenna Boulevard, Seattle, Washington 98115. The Scientific Exhibit Committee will meet in late April or early May to select exhibits to appear during the Annual Meeting.

Scientific Program Nearing Completion

The Scientific Program Committee plans on completing the selection of guest speakers for the Annual Meeting soon. Scientific Papers submitted by WSMA members will be selected and scheduled into the program before the end of June. It is planned that the first printed desk copy of the Scientific Program will be mailed to WSMA members early in August.

New Member of EAB

David H. Dillard, Associate Professor of Surgery at the University of Washington School of Medicine has been appointed to the Editorial Advisory Board to replace Lloyd M. Nyhus. Dr. Dillard graduated from John Hopkins University School of Medicine in 1950. After internship at John Hopkins Hospital he came to Seattle for surgical residency at King County Hospital. He was appointed Assistant Professor of Surgery in 1959, and Associate Professor in 1963. He is certified by the American Board of Surgery and the Board of Thoracic Surgery. He is a member of the American College of Surgeons, The American Association for Thoracic Surgery, the Pacific Coast Surgical Society and the North Pacific Surgical Association. Dr. Dillard has contributed numerous journal articles and has written chapters in textbooks on "Hernia" and on "Surgery of the Stomach and Duodenum" by Harkins and Nyhus and in "Geriatric Surgical Emergencies" by Jesseph and Harkins.

DAVID H. DILLARD, M.D.

Members of the Editorial Advisory Board guide the editorial policy of the journal, encourage worthwhile contributions to the scientific section and evaluate manuscripts submitted. Evaluation committees are appointed by the Chairman of the Editorial Advisory Board and a minimum of three opinions is obtained for every manuscript. Members of the committees have been free to seek additional opinions from those with special background or experience. Names of all members of the Editorial Advisory Board, as well as of the Board of Trustees, are carried on the masthead, page 310 in this issue.

OBITUARIES

DR. HERMAN C. BEHLA, *Edmonds, Washington, died Feb. 4, 1967, at the age of 87. Dr Behla was a 1917 graduate of Chicago College of Medicine and Surgery. He was licensed in 1921 and was in general practice. He was retired at the time of his death. Cause of death was coronary insufficiency.*

DR. MELVIN F. LAVIOLETTE, *Seattle, died Jan. 30, 1967. He was 70. He was graduated in 1923 from the University of Minnesota Medical School, Minneapolis, subsequently setting up practice in Seattle. He served in World War I. Death was due to carcinoma of the pancreas.*

DR. WILLIAM ELLES RUSSELL, *53, of Issaquah, Washington, died Feb. 15, 1967. He was a 1940 graduate of the University of Illinois College of Medicine, at Chicago. He did post graduate work at the University of Chicago. He interned at Swedish Hospital in Seattle, Firland Sanatorium and Children's Orthopedic Hospital.*

Dr. Russell founded the Medical Department at the Boeing Airplane Company, where he was Medical Director from 1941 to 1951. He was medical consultant with the Washington Department of Labor and Industries in 1958 and 1959. He retired from practice in 1959. He was a member of the American Academy of Occupational Medicine, Industrial Medical Association, and the American College of Preventive Medicine. He served in the Army during the Korean War. Cause of death was coronary occlusion.

DR. WILLIAM HENRY CALHOUN, *Seattle, died Feb. 9, 1967. He was 74. Dr. Calhoun, born in Oklahoma Territory, came to Seattle in 1918 after serving in the Army during World War I. He was a 1917 graduate of Meharry Medical College, Nashville. He practiced medicine in Chicago for a short time before opening a medical practice in Seattle. Cause of death was myocardial infarction.*

DR. JOSEPH E. MIDGETT, *Des Moines, Washington, died Feb. 10, 1967. He was 91. Dr. Midgett was born in Flat Rock, Ill., and graduated from Illinois Medical College, Chicago, in 1903. He came to Seattle in 1936 after practicing medicine in rural areas of Montana for many years. He practiced in Des Moines from 1937 until retiring in 1961. Cause of death was cardiac arrest due to arteriosclerotic heart disease.*

IDAHO

Idaho State Medical Association—360 SONNA BUILDING, Boise, Idaho 83702

PRESIDENT *A. Curtis Jones, Jr., M.D., Boise*
SECRETARY *William R. Tregoning, M.D., Boise*
EXECUTIVE SECRETARY *Mr. Armand L. Bird, Boise*
Annual meeting, June 28-July 1, 1967, Sun Valley

Special Meeting Called To Consider House Bill

A special meeting of the Officers and Councilors with the Presidents of the Component Medical Societies and members of the Medical Education Committee and State Legislative Committee met in Boise on Saturday, Feb. 11, 1967. It was called by President A. Curtis Jones of Boise, after conferring with members of the Council, and at the request of the State Legislative Committee, to consider the association's position on House Bill No. 137 which called for an Idaho Medical Education Study Commission.

H.B. 137 has passed the House and Senate and has been signed by Governor Don Samuelson.

The day-long meeting was attended by the following physicians: President-Elect James R. Kircher, Burley; Immediate Past-President Wallace H. Pierce, Lewiston; Secretary-Treasurer William R. Tregoning, Boise; Councilors J. B. Marcusen, Nampa; George W. Warner, Twin Falls; O. D. Hoffman, Rexburg; AMA Delegate Alexander Barclay, Couer d'Alene, and AMA Alternate Delegate Donald K. Worden, Lewiston.

Component society Presidents attending included: Wilbur C. Hayden, Sandpoint, Bonner-Boundary Society; Wilbur H. Lyon, Coeur d'Alene, Kootenai-Benewah Society; E. E. Gnaedinger, Wallace, Shoshone County Society; Burton R. Stein, Lewiston, Vice-President, North Idaho Society; Oaks H. Hoover, Caldwell, Southwestern Idaho Society; Gus E. Rosenheim, Boise, Ada County Society; Richard K. Gorton, Pocatello, Southeastern Idaho Society; Jack R. Carey, Idaho Falls, Idaho Falls Society; and Kitchener E. Head, Driggs, Upper Snake River Society.

Members of the Medical Education Committee attending were Robert E. Staley, Kellogg, chairman; Paul B. Heuston, Twin Falls; George E. Brown, Jr., Twin Falls; Dauchy Migel, Idaho Falls; and Miles E. Thomas, of Boise.

Members of the State Legislative Committee who attended were Loy T. Swinehart, chairman; Alfred M. Popma; Raymond L. White, and Howard E. Adkins, all of Boise.

Others attending included Paul M. Ellis, Wallace, chairman of the Idaho Board of Health; Robert S. McKean, Boise, Idaho WICHE Medical Program Director; Lloyd S. Call, Pocatello, member of the Advisory Committee, Intermountain Regional Medical Program, University of Utah; and Maurice M. Burkholder, Boise, a member of the Board of Directors of the Idaho Foundation for Medicine and Biology, Inc.

Following a four-hour discussion, during which most physicians attending spoke on the proposed bill, President Jones called for a vote of endorsement or rejection. The vote favored the measure.

Based on this opinion, the Officers and Councilors voted to add the endorsement of the Idaho Medical Association to the measure. This information was released to the general public and furnished the Education Committee of the Legislature. There is no doubt that the Association's endorsement contributed largely to passage of the proposal.

Dermatology Course Held

A dermatology course prepared in collaboration with the University of Washington School of Medicine, Seattle, was held March 10-11, at the second in a series of scientific-ski sessions sponsored at Schweitzer Basin by the Bonner-Boundary Medical Society, according to W. C. Hayden, Sandpoint, president.

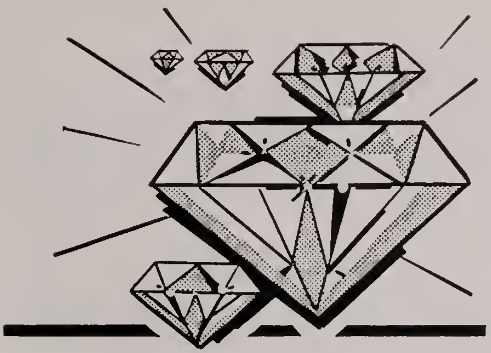
Dr. Mack Reappointed

Quentin W. Mack, Boise, has been reappointed a member of the Committee on Rating of Mental and Physical Impairment of the American Medical Association. The Committee is developing a series of guides to assist in evaluating permanent impairments.

Idaho News continued on page 391

DIAMOND

ANNIVERSARY



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REVIEWS

Books reviewed in the columns of Northwest Medicine may be borrowed by any subscriber. Write Miss Ruth Harlamert, Librarian, King County Medical Society Library, Room 105, Cobb Bldg., Seattle, Wn. 98101. The library appreciates, but does not demand, reimbursement for postage.

Diseases of the heart

By Charles K. Friedberg, M.D., Cardiologist to Mt. Sinai Hospital, Attending Physician for Cardiology; Associate Clinical Professor of Medicine, College of Physicians and Surgeons, Columbia University, 1,787 pp., 3rd Edition, W. B. Saunders, 1966.

Again Dr. Friedberg, in this new third edition of his text, *Diseases of the Heart,* has made a great personal contribution to the art and science of the practice of clinical cardiology. He has included many new sections and updated the old sections.

The pertinent new material includes a critical review of the Master's two-step test stating the rationale for both false positive and negative tests. The section on pulmonary embolism, its frequency, diagnosis and management, is excellent. The section on digitoxic rhythms is also outstanding since many of the fables in current practice are dispelled and up to date therapy is well outlined. Cardiomyopathies are included and are worth reading. The organization is poor, however, with idiopathic hypertrophic subaortic stenosis being discussed under the section on valvular aortic stenosis. New and pertinent drugs, ethacrynic acid, propranolol and dibenzyline to name a few, are well discussed. Pacemakers, both transvenous and implantable types, are discussed in detail with indications for use, hazards and results clearly outlined.

The two chapters on the pathophysiology of heart failure and its treatment have been updated and include a very sophisticated section on current concepts of the action of digitalis glycosides. This is also true of the chapters on coronary artery disease in which the new LDH isoenzymes are outlined and discussed, as is the value of a coronary intensive care unit.

The biblography at the end of each chapter is large, up to date and includes the titles of the new articles, which is very helpful. Of significance throughout this text is the author's buffering of new therapeutic measures by his insight and experience in dealing with chronic heart disease over a long period of time. This is most apparent in the chapter on cardiovascular surgery, with particular reference to prosthetic heart valves.

This book, by virtue of its readability, general organization, emphasis and scholarly bibliography is useful to students of medicine in all phases of their education, be they interns, residents, general practitioners or specialists in the cardiovascular area, and is highly recommended.

J. R. BLACKMON, M.D.

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spring 1967

DORSEY Season

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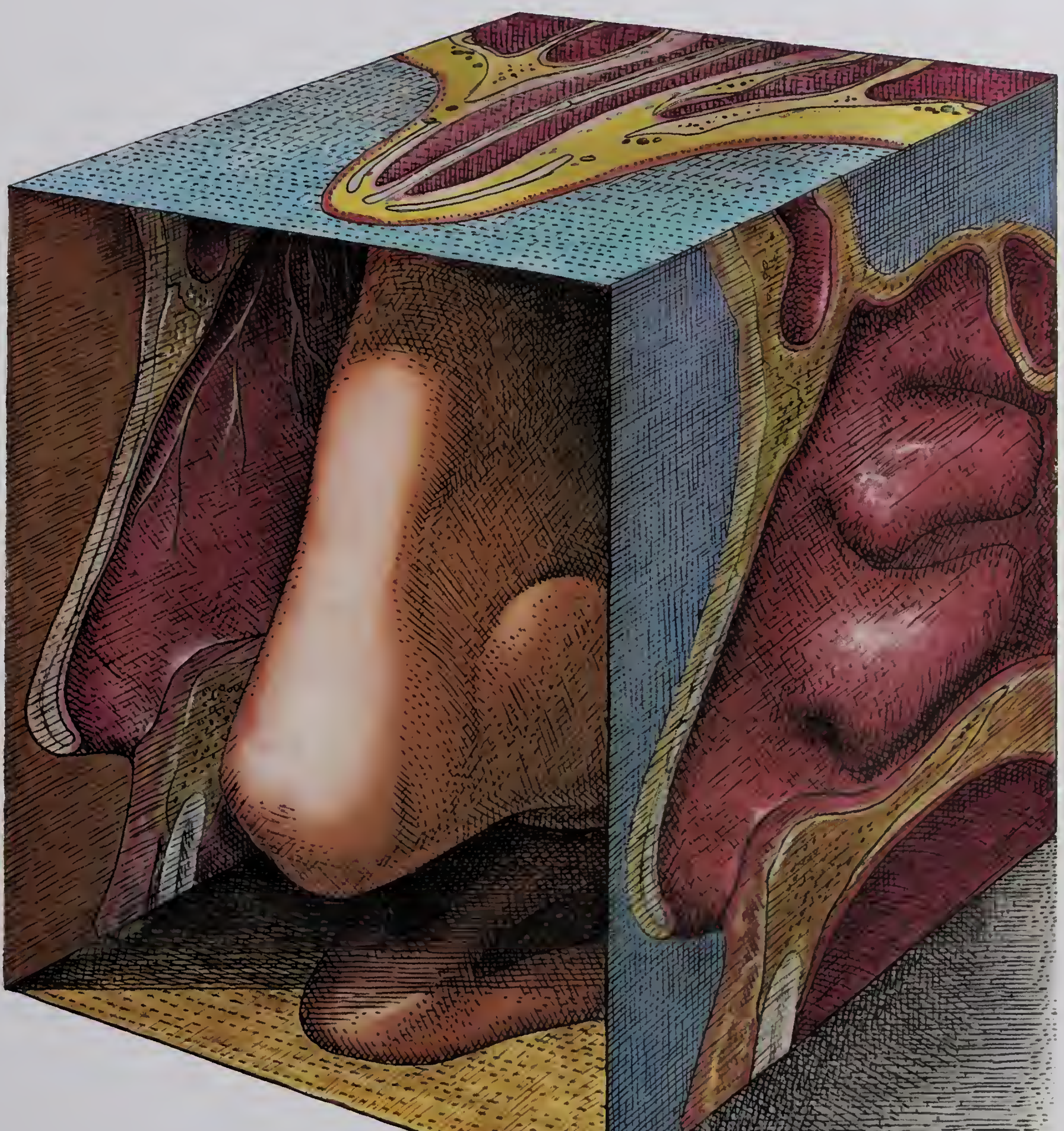


this issue: the ubiquitous world of summer allergies

the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

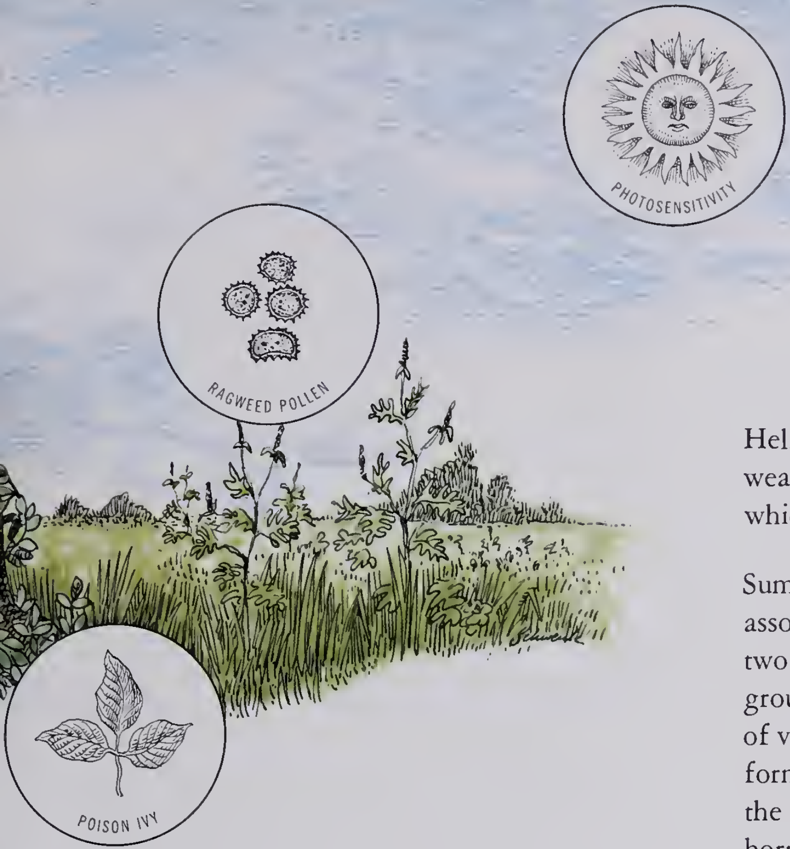
In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.[1] The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.[2] The entire tree season starts about April 1 and ends about Memorial Day, although all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.[3] Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.[4]

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is Alternaria—the kingpin of the molds—that meets a sudden demise with the first frost. Alternaria-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, Alternaria counts are at their highest, perhaps associated with the burning of leaves. Other molds such as Hormodendrum and Helminthosporium are associated with the warmer weather, as opposed to Penicillium and Aspergillus which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.[5] Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.[6] Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

Another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.[7] Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.[8] It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

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(Advertisement)

continued from page 384

State Board of Medicine Section

The following three physicians obtained Temporary Licenses in February: Kermit V. Ragain, Idaho Falls, a graduate of the University of Oregon Medical School, Portland, 1965, internship, Fresno County General Hospital, Fresno, California, General Practice; Donald R. Barnes, Nampa, graduate Northwestern University School of Medicine, Chicago, 1959, internship, Evanston Hospital, Evanston, Illinois, residency in anesthesiology at the University of Colorado Medical Center, Denver, Anesthesiology; Manuel White, Spokane, graduate University of California School of Medicine, San Francisco, 1944, internship, San Francisco General Hospital, residency, surgery, Samuel Merritt Hospital, Oakland, Thoracic Surgery, Highland Alameda County Hospital, thoracic surgery.

* * *

advance notice

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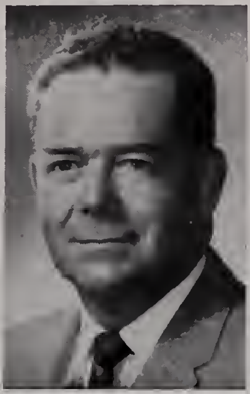
PRESIDENT'S page



A. CURTIS JONES, M.D.

Keep Informed

It's good to be back in McCall and to extend to you a very warm welcome to the Winter Clinics of the Ada County and Southwestern Idaho District Medical Societies.*

In reviewing the program, it appears this meeting is on its way to being another excellent scientific, ski, and social session.

From the way things have been going since I took office last July, it is a pleasant relief to be out of Boise for a few days, away from the 39th Idaho Legislature, the Social Security Administration, and the telephone.

I cannot seem to make comments any more without becoming a little involved with Public Law 89-97—the now infamous medicare law. It has now been in effect for eight months, but much is still being said and written about it.

Our government seems to be in a position similar to a mother trying to persuade her children that spinach is good, and good for them. It seems to me that most doctors are still unhappy about medicare because they believe that it was unnecessary. They know that old folks and poor folks have had medical care when they needed it, and that financial barriers did not really deprive sick people from adequate health care.

Most citizens seem to be somewhat unhappy about it including many over 65, because they don't like the enormous cost, the increase in taxes, and the big step toward socialism. So, the bureaucrats in the federal Department of Health, Education and Welfare are very busy trying to persuade us and and perhaps themselves that this spinach is good for us.

They point to Hill-Burton, Nurses Training Aid, Mental Health Aid, and so forth, as some of the benefits from the federal government to the health of the American people, and try to persuade us that medicare is another big benevolent scheme for the aged, the poor, the neglected and the sick.

Now after eight months of operation, a 164-page collection of amendments to the Social Security law of 1965 has been presented to Congress.

Among the changes contemplated would be extending medicare to include the disabled, enabling federal facilities to receive payments under Part A of Title XVIII, including non-routine chiropody services, and many other things.

Sen. George D. Aiken, Republican from Vermont, has introduced an all-encompassing bill, SB-110, that would amend Title XVIII of the Medicare Law to fix fees of all physicians; to re-define Part A hospital services to include payments to radiologists, pathologists, anesthesiologists, and physiatrists that would eliminate their direct billing of patients; pay for an annual physical examination; and, also to have drugs prescribed on a generic name basis.

Interesting is the announcement that the funding of Social Security calls for an increase in the taxable wage base from $6,600 to $7,800 in 1968, to $9,000

continued on page 400

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*Comments at Winter Clinics, McCall, Idaho, March 3, 1967

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for

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- BRONCHIECTASIS

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Aminophylline	130 mg.
Phenobarbital, Caution: May be habit forming	21 mg.
Ephedrine HCl	16 mg.

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DOSAGE

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Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

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3 out of 4 osteoarthritics completely or markedly improved

Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964.	76.9% of 407 patients
Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966.	84.6% of 39 patients

Please see adjoining page for brief prescribing summary

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Contraindications: Patients hypersensitive to antihistamines. Not recommended for use during pregnancy.

Precautions: Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.

Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability, or excitement may be encountered.

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*Schiller, I. W., and Lowell, F. C.: New England J. Med. 261:478, 1959.

X-Ray of the Month on Page 369

The film shows right pneumothorax with atelectasis of the right upper, middle and lower lobes, each of which is separately identifiable. The film was intentionally made on forced expiration, which accounts for the higher position of the left hemidiaphragm and the increased density of bronchovascular markings of the normal left lung. The mediastinal structures, including the heart and trachea are displaced into the left thorax. The air density projected to the left of the spine over the upper heart shadow represents herniation of the right lung and pleura into the left hemithorax (the herniation is anterior to the mediastinum, as well demonstrated on a lateral projection).

These findings are classical of a tension pneumothorax, where there is a rent in the visceral pleura and the parietal pleura remains intact. In this case, the rent in the visceral pleura acts as a check valve, allowing air to escape from the lung into the pleural space on inspiration, but does not allow it to return to the lung. Therefore, the volume of air in the pleural space and the pressure gradually increase, so that the diaphragm cannot ascend, the lung herniates into the opposite hemithorax, along with shift of the mediastinal structures. This produces compression of the normal lung, gradually reducing its aeration.

Even when tension pneumothorax is not present, a film on expiration is very helpful, since it accentuates the degree of air in the pleural space and makes it simpler to diagnose cases of minimal pneumothorax.

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Norris H. Perkins, M.D.
John W. Evans, M.D., Consulting Psychiatrist
Physicians

continued from page 393

in 1971, and to $10,800 by 1974, with small increases in the tax rate up to 10.1 per cent in order to meet the increases in cash benefits.

Another tidbit is that Social Security taxes beginning in 1974, could deprive a 21-year-old worker of $52,747.20 of his life's earnings. This is almost unbelievable but it will prove true if the wild and unrestrained plan for improving Social Security is enacted into law.

While all sorts of political maneuvering is going on in Washington, I think that it behooves all of us to be informed, to do our best to inform our patients, and to suggest changes in the law or in administrative procedures, as best we can.

And we do have influence through our patients and friends, when we ourselves stay informed, that may result eventually in the election of a more representative government, responsive to the will of the people and not to federal bureaucrats.

I am confident that it is not too early for us to begin making solid plans for the 1968 election campaigns. You are going to be asked to do your share, and I do trust that you will respond as you have in the past.

Now, I would like to mention something more pleasant. The 75th Anniversary meeting of the Idaho Medical Association will be held at Sun Valley, June 28 through July 2, 1967. I urge you to make a note of the dates. ■

M.D.

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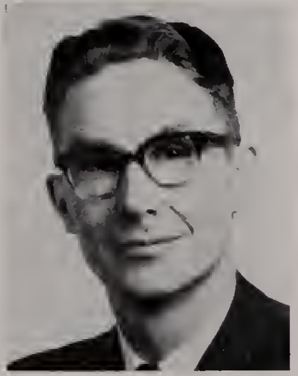
Role of the County Medical Society in the Future

CLINTON S. McGILL, M.D., Portland, Oregon

Any consideration of the future role of the County Medical Society must first begin with the direction the practice of medicine appears to be heading. Just a month ago, it was my privilege to attend the First National Congress on the Socio-Economics of Health Care sponsored by the Council on Medical Service and the Division of Socio-Economic Activities of the American Medical Association. For two full days, we heard various high-level experts describe medicine's role in the changing social scene and their predictions of the future course of health care in the United States. Although the conference considered a very wide range of subjects, two fundamental concepts emerged. First, and foremost—the growing demand for "Comprehensive Health Care" and second, means of financing health care services. I should like to touch on the important facets of these two major concepts, especially as they relate to the future role of the county medical society. Fully recognizing the importance of our national and state organizations, in the final analysis, the county medical society is where the action is.

"Comprehensive Health Care" is a sound principle and one we would all support. If we try to define more clearly what is meant by this concept, we find that it immediately subdivides into two areas. First, the *place* such care will be delivered, or the "Community Health Center," and second, the *manpower* and how to get it.



CLINTON S. MCGILL, M.D.

The idea of the "Community Health Center" has appeared on the scene from many directions, but essentially it represents the gradual shift from the solo practitioner's office to hospital-based group practice—in whatever form it may occur. Whether or not we agree with this change in emphasis is not the point—the fact remains that it is happening. This shifting base of medical practice immediately suggests many areas of utmost importance to the county medical society.

Where should such a facility be located? This involves "area wide hospital planning." At present, most such planning groups are voluntary and have been actively supported by organized medicine. Under a new federal statute, Public Law 89-749, *all* health care planning must be done by a single state agency and at least half of the members of this agency (or board, commission, etc.) must be "consumers of health services" (sic!) or in other words, *not* doctors or other professionals in the health care field. If we are to have any voice at all in the location of our future place of practice, the county medical society must seek the strongest possible representation on any such planning agency.

The proper organization of emergency services in a "Community Health Center" needs a great deal of our attention. Use of the emergency room as an out-patient clinic is mushrooming all over the country. The use of full-time salaried physicians, employed by the hospital, is steadily increasing. It must be realized that under Title XVIII and Title XIX of Public Law 89-97 (Medicare) and the Office of Economic Opportunity, just about everyone is a private patient and could make use of such services. Who should work out the ground rules for the proper staffing of emergency rooms? The county medical society.

The coordination of emergency services is another big problem. It is simply impractical and uneconomical to staff *all* emergency rooms of *all* hospitals in a metropolitan area with a full complement of specialists and facilities. The Hospital planning Association of Allegheny County (Pennsylvania) studied this problem in depth and recommended that Emergency Rooms be graded in four classes, from simple first aid to definitive care. Such a plan would immediately require an efficient communication network so that patients can be directed to the appropriate hospital. Disaster organization must be included in any comprehensive emergency plan. Then there are specialized emergency services, such as a suicide prevention center, poison control centers, psychiatric emergency centers. Probably most important, there must be an on-going public education program to inform the public of the existence

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Dr. McGill is President-elect of the Multnomah County Medical Society, Speaker of the House of Delegates, Oregon Medical Association.

Presented at the Seventh Annual Officers, Trustees, and Commissioners Conference, Multnomah County Medical Society, Salishan Lodge, Gleneden Beach, Oregon, February 24-26, 1967.

of these facilities, and how best to use them. Clearly, all of these areas are the proper concern of the county medical society.

Staff organization within the hospital should be mentioned. Ordinarily, this will be handled intramurally, but there are special situations which will involve the local medical society. For example, where a hospital utilization review committee (under Medicare) does not function properly, the medical society is directed to assume its function. Certainly some standardization of hospital by-laws is needed. Some means of "quality control" is being demanded by government agencies and private insurance carriers alike. The Illinois Supreme Court has ruled (Darling, November 1965) that a hospital staff must develop and enforce realistic by-laws and standards of practice, which must include the features of recognized accreditation bodies and licensing agencies, whether public or private. In effect, this ruling says we must police our own house by developing effective means of quality control. Surely the medical audit looms just over the horizon. Already, sophisticated management techniques are being applied to medical care. A series of efficiency indices have been developed and are being subjected to computer analysis in order to analyze quality care. It may be anticipated that in the foreseeable future payment for services will be related to some type of computerized efficiency rating, however terrifying that thought may be. It takes only a moment of reflection on these points to realize how important it is that organized medicine be involved in the development and implementation of any such plan.

Now let us turn our attention to the other major area of "Comprehensive Health Care"—the *manpower.* Here again we can subdivide the subject into *physicians* and what may be called *ancillary medical personnel.* No matter how well our "Community Health Center" of the future is organized, good medical care simply cannot be delivered without an adequate supply of well-trained people. It has been estimated that we will need to train 10,000 people per month to meet the total manpower needs in the health field. Without enough help, our standards of practice will surely deteriorate; therefore, the medical manpower shortage concerns us all.

At present, we are graduating enough physicians to maintain our ratio of one doctor for 670 people, yet the shortage of medical services continues to grow. About 90 per cent of our graduates will enter specialty training, yet only 62 per cent will actually practice medicine—illustrating the brain drain brought about by our immense research and teaching grants. Specialty training is generally a good thing, but it has served to fractionalize medical practice. As a result, there is considerable maldistribution of specialists and a growing shortage of family physicians. It should be mentioned here that about half of the general practitioners in this country are over 60 years of age. This alarming situation was a major consideration of the recent Millis Report on "The Graduate Education of Physicians." Great emphasis was placed on the need to train "Primary Physicians." Such an individual would play an important role in the "Multidiscipline Approach" to comprehensive health care. To train him properly, the Millis Commission recommended that bold changes be made in our present structure of postgraduate medical education. It will require the combined effort of *all* teaching facilities, both public and private, to accomplish this purpose. Obviously such a reorganization of facilities will vitally concern organized medicine—and not just those county societies wherein medical schools are located. Need I mention the plans for "Satellite Clinics" for rural areas contained in Public Law 89-239 (heart, cancer, and stroke)? The county society must serve as a vital common forum for diverging specialists—the well spring of medical education.

Perhaps the most immediate medical manpower problem involves the recruitment and training of sufficient ancillary personnel. The present supply from our existing educational system is simply not adequate. A very promising new source is the community college, now enjoying phenomenal growth throughout the country. They want and need our guidance in the development of curricula. The county medical society should respond with the greatest possible speed. In some areas, hospitals are already contracting with community colleges for paramedical personnel. It is my contention that a community college should be organized on an areawide need, rather than that of a single institution, thus the need for strong leadership by the county medical society.

Now for the moment, let's assume we can solve all these problems of staffing, building, and coordinating "Community Health Centers" so that "Comprehensive Health Care" can be delivered. There remains the very real problem of how to finance it. Here we find the term "Creative Federalism" appearing in our considerations. Although not a totally new concept, Medicare has given it real substance. In this context, it is meant to include all manner of federally financed, but privately administered health care programs. In the past, nearly all federally financed health programs were administered by some agency of government, either local or national. Both parts A and B under Title XVIII of Public Law 89-97 (Medicare) are structured under this partnership of government and private industry. The very size and scope of Medicare dwarf all previous medical care programs. Now Title XIX, under the same law, appears likely to extend the partnership still further. The Office of

Economic Opportunity is considering the private insurance mechanism to finance medical care for the disadvantaged or "deprived" segments of our population. The Federal government and the insurance industry must necessarily negotiate with organized medicine to carry out these vast, complicated programs. If we are to maintain some semblance of the private practice of medicine as we know it, we *must* be involved in the planning and development; we *must* be ready to develop the ground rules. In short, the county medical society must be ready to become operational. Actually, we are already involved in such matters. County insurance review committees are extant in most areas. Negotiation for the "Usual and Customary" fee principle is another example. Quality control related to payment is worthy of our soberest consideration—these are just the beginning.

As a final point, I should like to mention local health programs now being sponsored by county medical societies, and the possibilities for the future. It is here the layman learns of the important public service work of the local medical society. School health, coverage of athletic events, immunization drives, blood bank supervision, disaster organization, first aid training, water safety, physician answering service—these are just a few. The important work of a good grievance committee should be mentioned. New areas of public service will need to be explored in the future. There is considerable public demand for a thoughtful modernization of abortion laws, sterilization procedures, and contraception—all clearly within our province. The need for a comprehensive community sex education program, at all levels, is increasingly apparent. Here we might help recruit and organize the best talents from the church, the schools, the health educators, the family counselors, the social workers, as well as the informed and articulate members of our own profession.

The role of the county medical society in the future? It will be a busy one indeed. It will require the most enlightened leadership we can muster, the combined energies of its members, and the best possible organization, if we are to do justice to the task. In the final analysis, the medical society is *you*, and the future of medicine lies in *your* hands.

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Antibiotic	Median	Range	Median	Range	Median	Range
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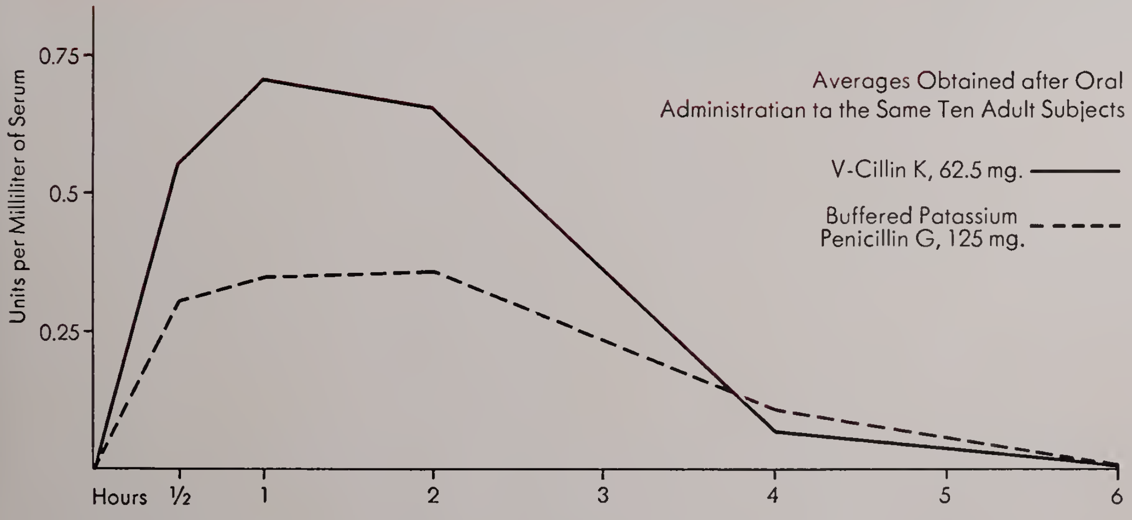
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

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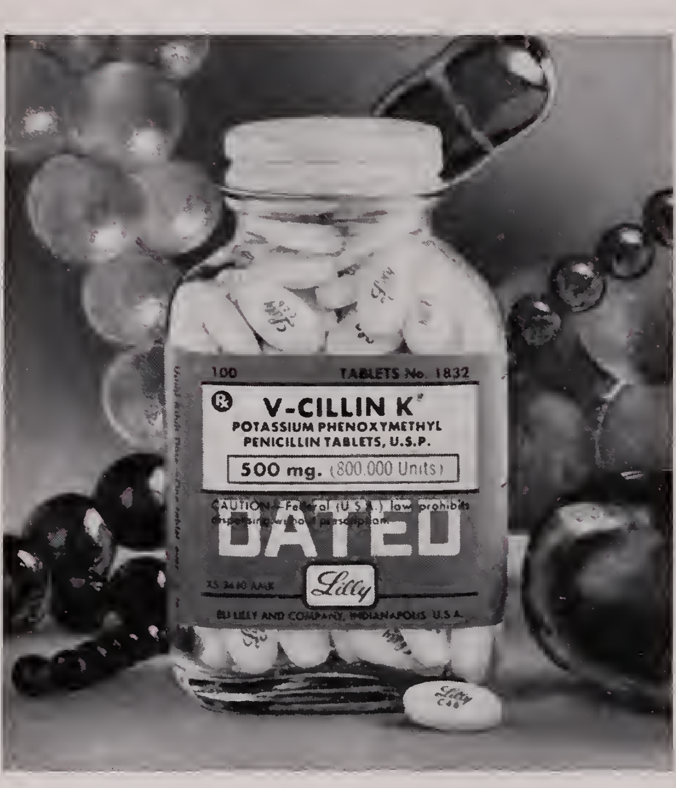
(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses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Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,0000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [011867]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

70015

"[illegible] vertigo is my doom!"
Cried Stanley in his doctor's room.

Said the doc, "For your ills
I've got just the pills."

Said Stan,
"Antivert, I presume."

*Anti*vert® tablets/syrup stops vertigo

(meclizine HCl, niacin)

Tablets: (meclizine HCl 12.5 mg. and niacin 50 mg.) Syrup: (each 5 cc. teaspoonful contains meclizine HCl 6.25 mg. and niacin 25 mg.)

Most widely prescribed anti-vertigo agent[1] Complete to moderate relief of symptoms in 9 out of 10 patients[2]

Antivert, the leading anti-vertigo product,[1] combines meclizine HCl, an outstanding drug for treatment of vestibular dysfunction, with niacin, a drug of choice for prompt vasodilation. Prescribe Antivert for your patients with vertigo, Meniere's syndrome and allied disorders.

Precautions and contraindications: Frequent, short-lived reactions include: cutaneous flushing, sensations of warmth, tingling and itching, burning of skin, increased gastrointestinal motility, and sebaceous gland activity. In explaining these reactions to the patient, it is suggested that they be regarded as a desirable physiological sign that the niacin is carrying out its intended function of vasodilation. Because of this vasodilation, severe hypotension and hemorrhage are obvious contraindications to Antivert therapy. Although the incidence of drowsiness and other atropine-like side effects such as dry mouth and blurring of vision is low, the physician should alert the patient to the need for due precautions when engaging in activities where alertness is mandatory. **Use in women of childbearing age:** A review of available animal data reveals that meclizine exerts a teratogenic response in the rat. In one study a dose of 50 mg./kg./day (50 times the maximum recommended human dose) produced cleft palate in 2 of 87 fetuses when administered to the rat at critical times during the first 15 days of gestation. At doses of 125 mg./kg./day, meclizine will produce 100% incidence of cleft palate in the rat. At doses of 25 mg./kg./day, decreased calcification of the vertebrae and relative shortening of the limbs were also produced in the rat, but experts disagree as to whether this is a teratogenic response. While available clinical data are inconclusive, scientific experts are of the opinion that this drug may possess a potential for adverse effects on the human fetus. Consequently, consideration should be given to initial use of a nonphenothiazine agent that is not suspected of having a teratogenic potential. In any case, the dosage and duration of treatment should be kept to a minimum. **Dosage:** One tablet or one to two teaspoonfuls (5-10 cc.) t.i.d. just before meals. Specific requirements for individual patients should be determined by the physician. **Supplied:** Tablets in bottles of 100 and 500. Syrup in pint bottles. RX only.

References: 1. Based on 1966 data from independent physicians' market survey organization. 2. Scal, J. C.: Eye Ear Nose & Throat Month. **38**:738 (Sept.) 1959.

Neobon®

geriatric supplement

helps keep them 'on the go'

Each capsule contains:

(1) Vitamins and Minerals	
Vitamin A (acetate)	2000 U.S.P. units
Vitamin D (ergocalciferol, U.S.P.)	200 U.S.P. units
Vitamin B_1 (thiamine mononitrate, U.S.P.)	0.5 mg.
Vitamin B_2 (riboflavin, U.S.P.)	0.5 mg.
Vitamin B_6 (pyridoxine HCl, U.S.P.)	0.5 mg.
Niacinamide, U.S.P.	50 mg.
Calcium pantothenate, U.S.P.	5 mg.
Vitamin E (di-alpha tocopheryl acetate)	5 I.U.
Rutin	5 mg.
Cobalt (from cobalt sulfate)	0.033 mg.
Molybdenum (from sodium molybdate)	0.066 mg.
Copper (from copper sulfate)	0.33 mg.
Manganese (from manganese sulfate)	0.33 mg.
Magnesium (from magnesium sulfate)	2 mg.
Iodine (from potassium iodide)	0.05 mg.
Potassium (from potassium sulfate)	1.66 mg.
Zinc (from zinc sulfate)	0.4 mg.
(2) Hematopoietic Factors	
Iron (from ferrous sulfate)	3.40 mg.
Vitamin B_{12} (cobalamin concentrate, N.F., as Stablets®)	1 mcg.
Vitamin C (ascorbic acid, U.S.P.)	50 mg.
(3) Digestive Enzyme	
Pancreatic substance*	50 mg.
(4) Gonadal Hormones	
Methyltestosterone, N.F.	1.0 mg.
Ethinyl Estradiol, U.S.P.	0.006 mg.
(5) Amino Acids	
L-lysine (monohydrochloride)	50 mg.
L-Glutamic acid	30 mg.

*Enzymatically active defatted material obtained from 250 mg. of whole fresh pancreas.

For older adults who require it, daily supplementation with Neobon can help overcome decreases in endogenous gonadal hormone production, as well as deficiencies of iron, vitamins and other nutritional factors. In a single convenient capsule, Neobon provides vitamins, minerals, gonadal hormones, hematopoietic factors, digestive enzymes, and amino acids—all selected for adjunctive therapeutic value in the geriatric syndrome. For example, one of the gonadal hormones in Neobon is ethinyl estradiol. It is more slowly metabolized in the body than natural estrogens or their esters.

Precautions: Contraindicated in patients in whom estrogen or androgen therapy should not be used, as in carcinoma of the breast or prostate.

Dosage: One capsule, t.i.d. with meals, or as directed by physician.

Supplied: Bottles of 60 capsules. Rx only.

J.B. ROERIG DIVISION
CHAS. PFIZER & CO., INC.
NEW YORK, N.Y. 10017

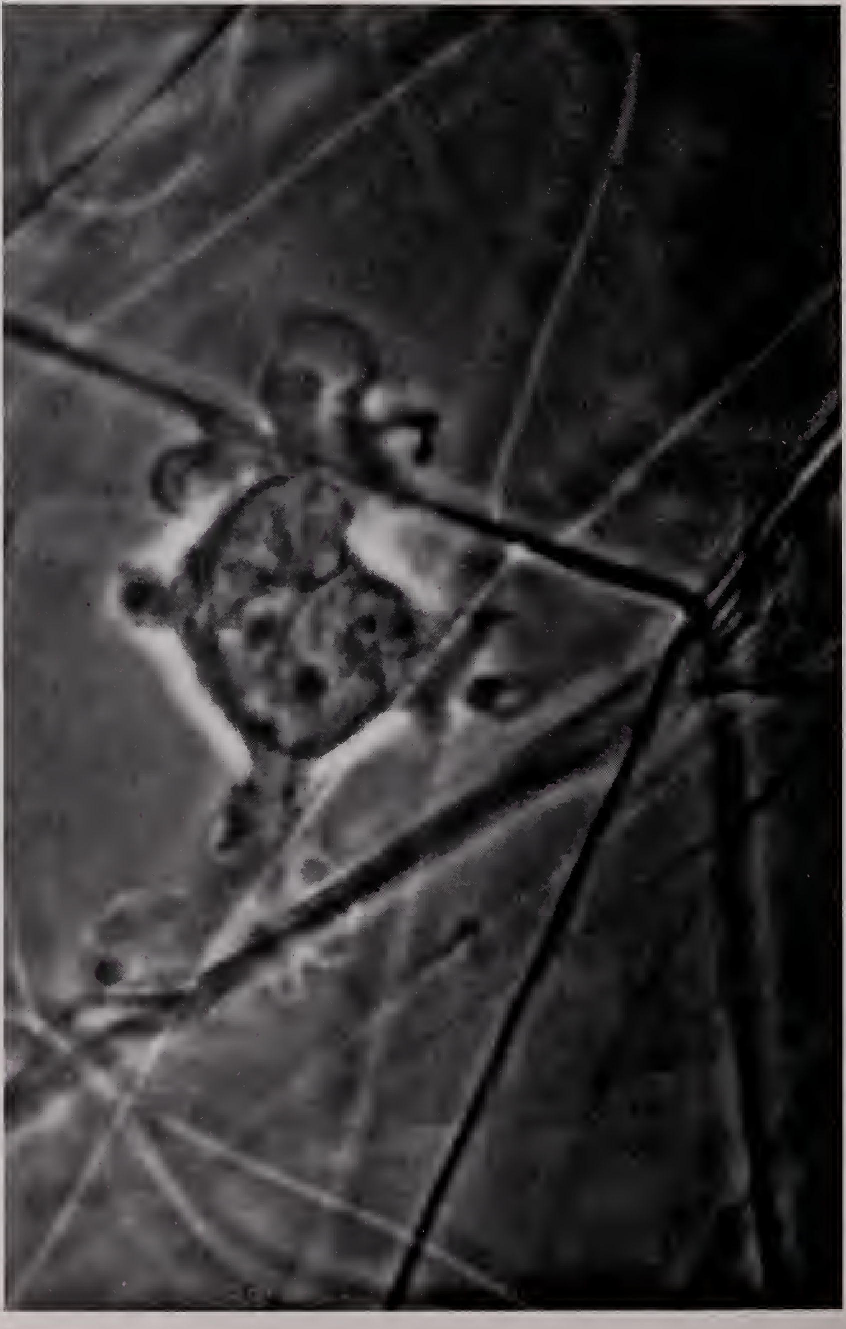
INFLAMMATION:

A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

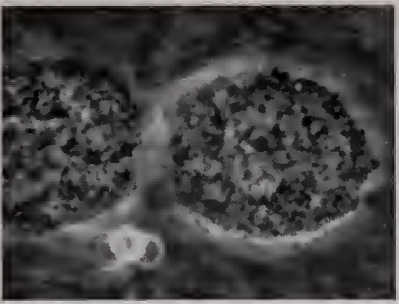


Visual evidence of how corticosteroids influence the inflammatory reaction

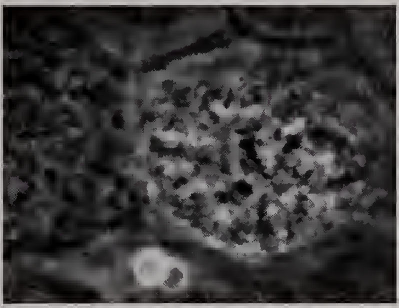
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



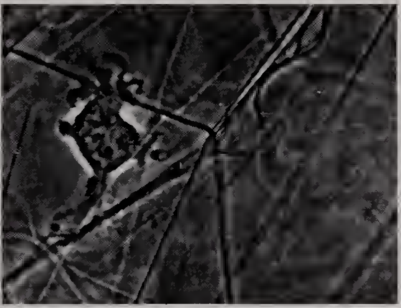
Phase-contrast microscopy showing mast cell before injury.



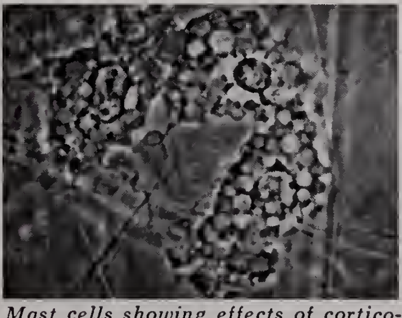
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

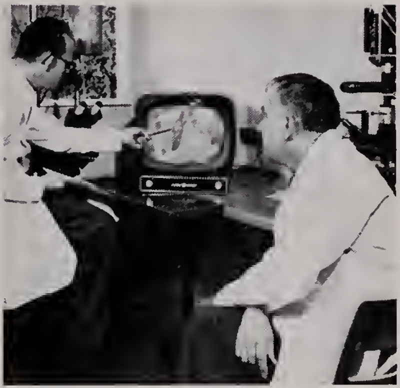
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



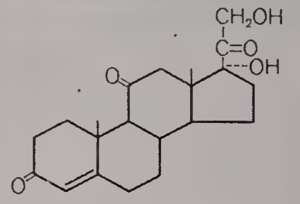
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses*, a film based on this study, is now available from your Syntex representative.

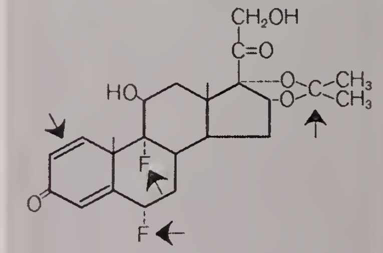
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

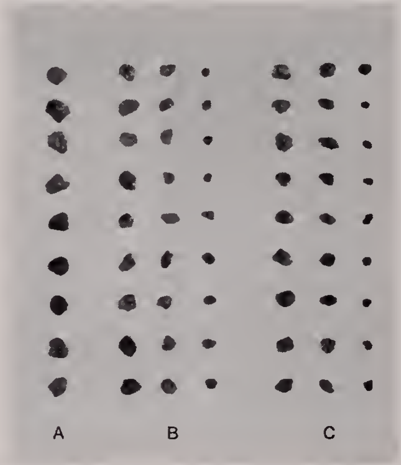


Fluocinolone Acetonide (Synalar)

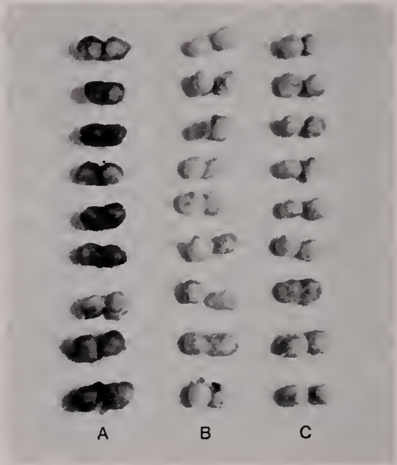
- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B —injected with 1, 2 and 4 mg. of hydrocortisone—show progressively smaller thymuses as does Group C—injected with fluocinolone acetonide —but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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For inflammatory dermatoses...
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Synalar® (fluocinolone acetonide)

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Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards

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Copy must be received by the advertising supervisor at the editorial office not later than 20th of month preceding date of issue. Proof is not shown. Copy of add as it appeared in the journal accompanies billing.

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EXCELLENT GP OPPORTUNITY TO ASSOCIATE—With 2 very busy practitioners. One with residency in surgery preferred. Choice of hospital facilites. Seattle area with the finest boating and fishing available. Write Box 3-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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PRACTICE READY AND WAITING—Longview-Kelso area. Busy industrial area (Cowlitz-Wakiakum Counties) of over 70,000 and growing rapidly. Extensive new construction in progress in 2 fine hospitals. GP's especially needed, but an opportunity for specialists. Medical demands on present physicians more than they can accomodate. Write Medical Society, c/o J. A. Nelson, M.D., 1026 Broadway, Longview, Wash. 96232.

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MEDICAL CENTER IN WESTERN WASH.—Has an opening for an internist and a dermatologist in a medical specialty group. City expanding rapidly with big industry and future outlook very promising. Climate and recreational facilities are excellent. Write Box 15-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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FARM OF 28 ACRES—14 irrigated, rest timber. Clean custom built all electric 3-bedroom home, 1½ baths, double fireplace, drapes, carpet. Full basement. Double garage, excellent outbuildings, machinery. Drilled well, berries, fruit. Springs, possible pond, 5 min. walk to river. 3 miles to Cle Elum, blacktop. Owner—8409 - 140th Ave. N.E., Redmond, Wash. TU 5-4228.

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Meetings OF MEDICAL SOCIETIES

AMA Annual—June 18-22; Atlantic City, 1967; San Francisco, 1968.

AMA Clinical—Houston, 1967; Miami Beach, 1968.

Oregon Medical Association—Sept. 19-23, 1967, Portland

Washington State Medical Association—Sept. 10-13, 1967, Seattle

Idaho State Medical Association—June 28-July 2, 1967, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society
Pres., Jack M. Docter, Seattle
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy
Pres., Wallace Lindahl, Seattle
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association
Pres., Frank C. Henry, Seattle

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

West Coast Allergy Society—Nov. 30-Dec. 2, 1967, Phoenix, Arizona
Pres., John S. O'Toole, Riverside, Calif.
Sec., Roy R. Matteri, Portland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.).
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
Sec., E. W. Landreth, Portland

Oregon Radiological Society—University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Frederick R. Asbury, Corvallis
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society—Quarterly Meetings, Congress Hotel. Portland
Pres., Donald Beardsley, Portland
Sec., C. A. Macfarlane, Portland

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland.
Sec., David Sellers, Portland

Portland Academy of Pediatrics—1st Monday
Pres., C. W. Van Rooy, Portland
Sec., Glenn Lembert, Portland

Portland Academy of Psychiatry — Fourth Tuesday except. Dec., Jun., Jul., Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May), Annual Meeting, May 6-7, 1967
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland.

UOMS Alumni Association
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract.—4th Mon., exc. June, July, Aug., Dec.
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Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto.—3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Robert Laughlin, Seattle
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Seattle Pediatric Society—3rd Friday (Sept.-May), Arctic Club
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Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society — Quarterly
Pres., Charles R. Cavanagh, Jr., Spokane
Sec., Robert E. Jensen, Spokane

Tacoma Academy of Internal Medicine—4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May) Annual Meeting, May 6, Tacoma
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle.
Sec., John E. Nelson, Seattle

Washington Academy of General Practice, Scientific Session, May 25-27, 1967, Seattle
Pres., Charles C. Strong, Vancouver
Sec., Wm. A. Ehlers, Lacey

Washington State Radiological Society—Quarterly, Seattle
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists
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Wash. St. Soc. of Allergy.
Pres., Paul Van Arsdel, Jr., Seattle.
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Yakima Surgical Society—Last Thursday (Sept.-May)
Pres., Frank LeCocq, Yakima
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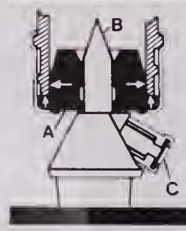

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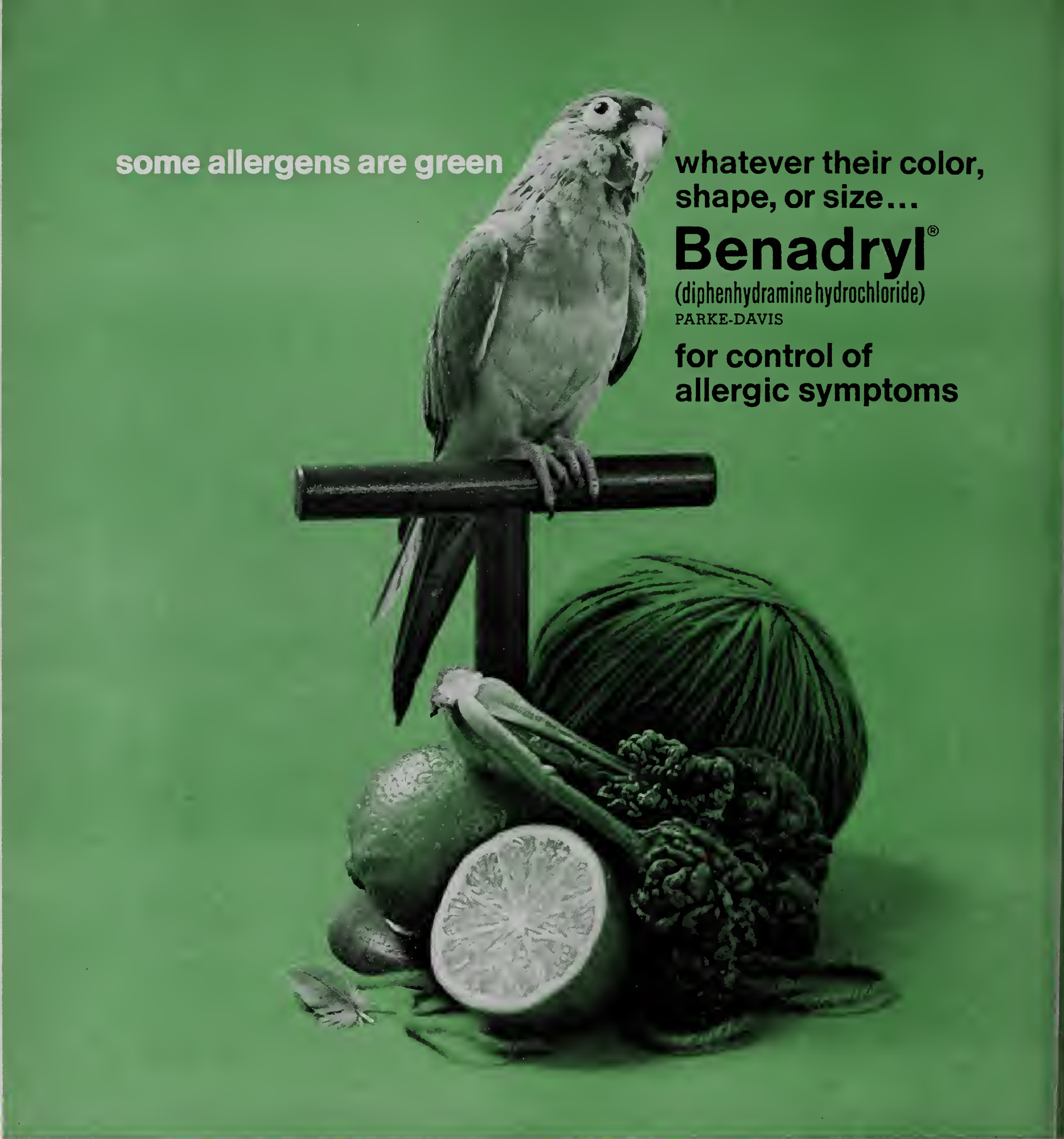
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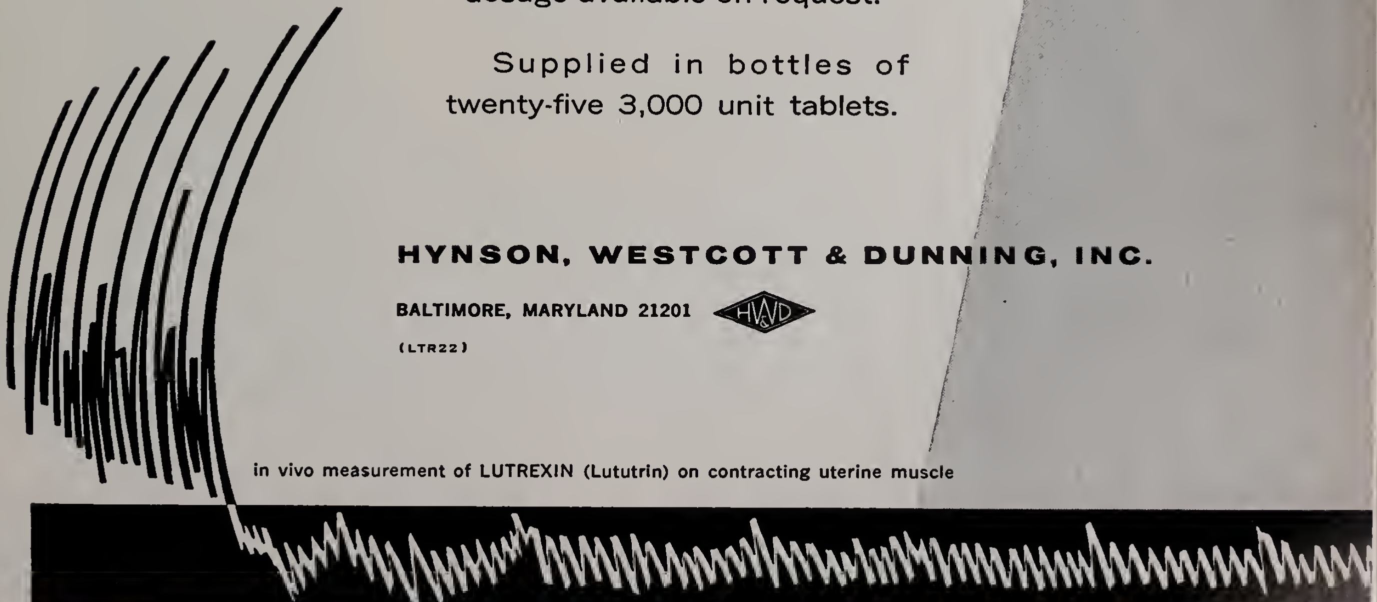

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Physicians for South Vietnam

Saigon, October 6, 1966

Editor, NORTHWEST MEDICINE:

According to the best estimates, there are about 15 million people in South Vietnam. There are two medical schools in the country, one in Saigon and one in Hue. However, for sometime, the school at Hue has not been in operation. Some of the faculty, the administration and the students became involved so deeply in factional politics that the school was closed and some of the faculty are in exile or in jail.

The educational system is of a French pattern. It was organized by the French during the more than 80 years they occupied French Indochina. Classes are conducted in French and at times in Vietnamese. During the past few years, there has been an attempt to conduct some lectures in English, as much of the medical literature is in English. The rigors of war have made the teaching somewhat haphazard and classes are irregular. There also seems to be a lack of coordination in the curricula as well as in the administration of the schools.

At the present time, there are 812 Vietnamese and 34 foreigners licensed to practice in Vietnam. Of the 34 foreigners who are licensed, about half are French and the other half are Chinese. Of the 812, 33 are women. There are also 150 medical school graduates who are not licensed because they have not completed their thesis as is required by the French system. Most of these are in the armed services. There are 327 licensed military physicians. This leaves 485, of which at least 85 are in administrative positions. Of the remaining 400 a goodly portion are not in practice. Even if they were all in active practice, that would still leave only one doctor for every 37,500 persons. This, in a land where living conditions are far from ideal, hygiene and control of disease almost non-existent and health hazards totally ignored. Contrast this with the United States where for years there has been vigorous control of contagious diseases, immunization programs have been almost universal and hygiene and living conditions are the best in the world. Even with this there is one doctor for approximately every 750 persons.

The statistics reveal, in a small measure only, the vast amount of medical needs in a country that is also plagued with thousands of casualties of war from which the civilians are not isolated or immune.

Tuberculosis is probably the greatest health problem. During the past few years, an attempt has been made to have all newborn innoculated with BCG by the midwives, who deliver nearly all of the babies in this country. The start has been slow, but an increasing number are given each year. If this program is continued and expanded, there could be some improvement with this condition, but it still will take many years. Malaria, while still common, is under a measure of control due to the program of the World Health Organization. Intestinal parasites are practically universal. There are numerous outbeaks of cholera, and plague is common. Many deaths occur from typhoid and small pox; diphtheria and tetanus can be seen at any time. In fact, most of the doctors who have come over from the United States have seen these diseases for the first time. Leprosy is also a common finding. All of these in addition, of course, to the many ailments and diseases seen in the States.

The poor living conditions, the lack of sanitation and isolation all contribute to the prevalence of poor health. Add all this to the thousands of war and civilian casualties, the shortages of doctors and hospitals, and you get an idea of the unbelievable need for medical care that exists here.

Early in the spring of 1965, Major General Rollin H. Anthis, at that time in charge of counterinsurgency for the Department of Defense, came to the conclusion that if the people could be given medical care through contact with American doctors and receive medical care for the myriad ailments which plagued them, it would aid the effort to win the people from the lure of communism and assist the war effort in Vietnam.

After several conferences with the State Department and AID officials, a plan was evolved to attempt to enlist the physicians of the United States to furnish this needed care to the people of Vietnam.

It was decided that an appeal would be made to the private physicians of America to assist in this effort. As there often is a measure of resentment to government medical programs, a contract was made with Project Hope of the People-to-People Foundation to direct the program. Full endorsement was given by the AMA and other medical societies.

The transportation of the physician would be paid and he would receive $10 a day for living expenses, for which he would spend two months working in the province hospitals of Vietnam caring for the civilian population.

On Sept. 1, 1965, the first of these volunteer physicians arrived in Saigon. During the first year, 150 American physicians accepted the challenge and donated their skill, time and talents in an effort to relieve some of the suffering of the mass of humanity in this far-off tropical land.

At the present time, 16 doctors arrive each month for a two month tour of duty. So that at all times there are 32 in the country. The work is hard, the hours are long, living conditions are not ideal, there is some hazard from Viet Cong terror attacks, supplies and equipment are at times short, and many of the hospitals are somewhat primitive by United States standards. The main complaint is not of their own discomfort from the heat and humidity, their fatigue from long hours of work, or the hazards of war or of contagious diseases, but of the fact that they are unable to accomplish as much as they would like, because of the limitations of human endurance, time and supplies. Several have stayed on a long-term basis, some have extended their tour of duty and many others have applied for a return assignment. From my own, and the observations of others, I am convinced that the American doctor is not only a highly trained, scientific physician but even more he is a dedicated humanitarian who is willing to, and does make sacrifices, in an attempt to aid his fellow man, with no thought of compensation or reward. The longer I observe these men, the more I am proud of my colleagues and my chosen profession.

After almost a year of directing the program, then called "Project Vietnam," William J. Walsh, M.D., Director of the program, requested that someone else be asked to administer the program. The AMA, at the insistence of USAID, assumed the responsibility for continuing the program on July 1, 1966, and is coordinating the program which is now called "Volunteer Physicians for Vietnam" (VPVN).

Beginning on Nov. 1, 1959, the Armed Services formed teams of young physicians with ancillary personnel (technicians, an administrator, male nurses, etc.) called "MILPHAP." This is "Military Provincial Health Assistant Program." There are usually three physicians with a team. At the present time, there are 25 of these teams in the country. Recognizing the dire need for health care, a number of others have also sent teams to this country. At this time the following have teams in Vietnam: Philippines, four teams; Korea, four; Australia, two (another on the way); New Zealand, Free China, Iran, Switzerland, Spain and Britain, one. Three other countries have indicated an interest and in the near future will probably send teams. Canada does not have any teams here, but has supplied extensive aid in the form of equipment and supplies. There are also two Cuban exile teams here under the auspices of the International Relief Commission. A hospital-ship recently arrived in Saigon and is anchored at the foot of Tu Do Street in the center of the city. It was sent here by West Germany. It is scheduled to start operation this next week and will probably be here at least a year.

All of the hospitals are crowded. Two patients to a bed is the rule and three is common and I have seen four in one bed. Fortunately, the Vietnamese people are not of large stature, so they are not as uncomfortable as you would think. At least one member of the family stays with each patient to assist in his care. While this may somewhat relieve the shortage of nurses, it certainly adds a great deal of congestion to already crowded facilities.

In some hospitals as high as 80 per cent of those treated are war casualties, usually the result of Viet Cong terror or repressive activities. With these acute casualties, the care of the backlog of non-emergencies is slow, and it will be several years before the citizens of Vietnam can receive even the minimum amount of adequate medical care. But at least a start has been made, thanks to the foresight and compassion of the Free World.

MALCOM E. PHELPS, M.D.,
Director, AMA Volunteer Physicians for Vietnam

Part-time Consultants

Editor, NORTHWEST MEDICINE:

As the full-time consultant of Disability Determination Program for the State of Oregon, I am interested in finding additional part-time consultants to assist me in the fields of orthopedics, and surgery.

The Disability Program provides monthly cash benefits for people under 65, if a physical or mental impairment keeps them from working for at least a year. These part-time consultants review medical reports submitted by physicians and hospitals. From the evidence, they then determine if the claimant's condition is disabling under the terms of the law.

The types of cases are quite interesting and there is the entire gamut of medical problems. The hours are fairly flexible and part-time consultants may work from two to 20 hours a week. The present salary level at our State Agency is $15 per hour. I shall appreciate communications from men in orthopedics or general surgery either within the Salem area or from another area who would be willing to come at least one day a week at a specified time.

Sincerely yours,
DON E. WOODARD, M.D.
State Department of Education

That Word Again

Editor, NORTHWEST MEDICINE

Paradoxically painful as it may be to prolong Dr. Ansell's nit picking spelling bee, readers of Northwest Medicine should be informed that neither Dr. Julian Ansell nor Dr. John Walker spelled correctly, the word they cited in their previously published letters to the editor as being misspelled in my December 1966 editorial and December 1941 article. The United States Pharmacopoeia gives an alternate to Diethylstilbestrol which is spelled Stilboestrol but fails to include the Stilbestrol spelling used by Drs. Ansell and Walker.

Fortunately this orthographic hair splitting has no effect on this drug's therapeutic efficacy and broad clinical usefulness.

Very truly yours,
CHARLES D. KIMBALL, M.D.
Seattle, Washington 88104

She simply sits while the party goes on around her, already used to being the girl who is left out. She tries to lose weight—but her emotions won't let her. She becomes irritable and depressed when she doesn't eat, and anxious when she considers her future. So each time she gives up.

"What can I do?" she asks when she visits your office. "How can I ever stay on a diet and lose weight?"

A PARTICULAR COMBINATION OF ACTIONS

Ambar #2 Extentabs®

methamphetamine hydrochloride 15 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

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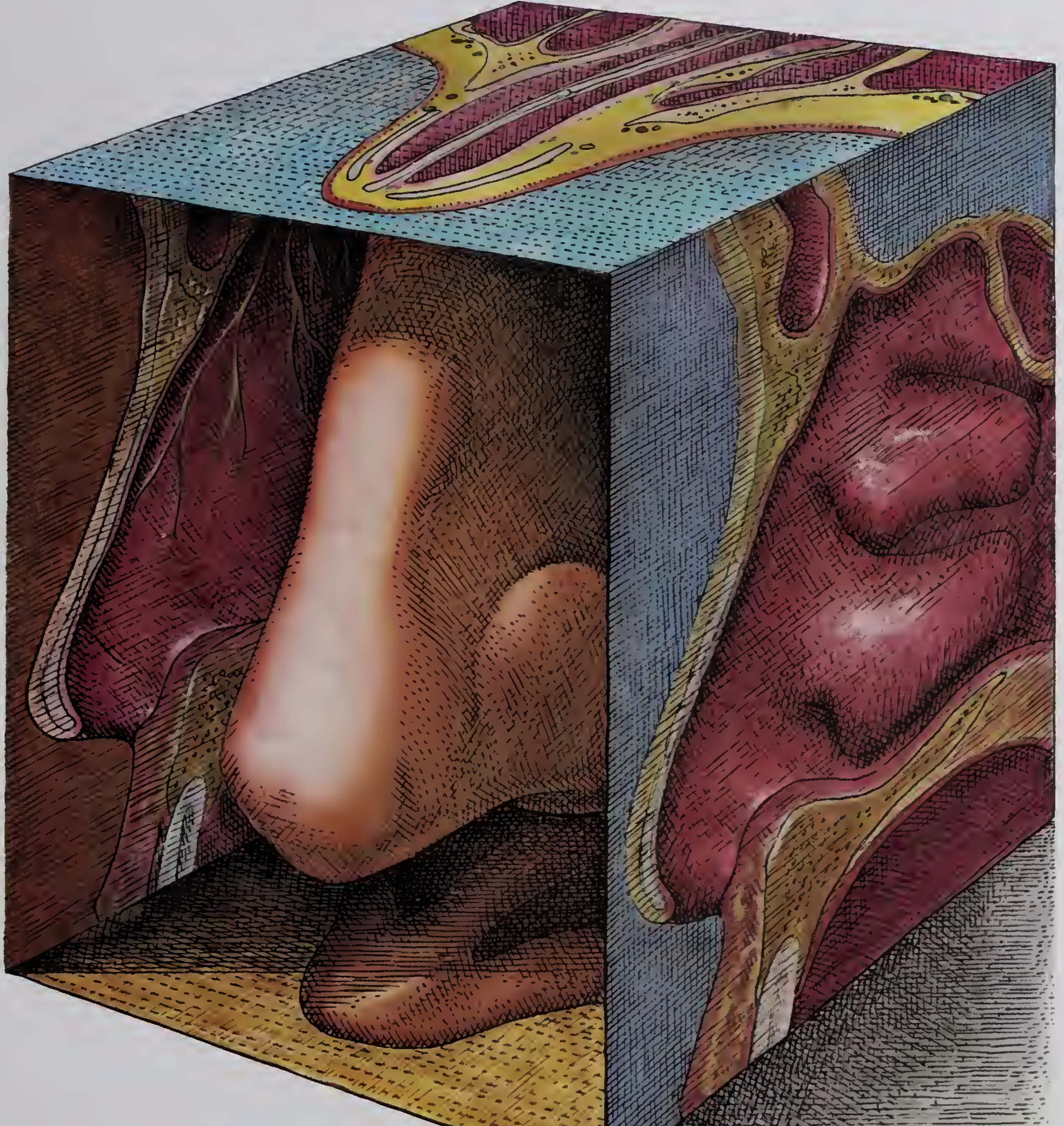
Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY / *Indications:* Ambar suppresses appetite and helps offset emotional reactions to dieting. *Side Effects:* Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. *Precautions:* Administer with caution in the presence of cardiovascular disease or hypertension. *Contraindications:* Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. See package insert for further details.

spring 1967

DORSEY Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.



this issue: the ubiquitous world of summer allergies

the ubiquitous world of summer allergies

Donald L. Unger, M.D. • Clinical Assistant Professor, Department of Medicine (Allergy), Stritch School of Medicine (Loyola).

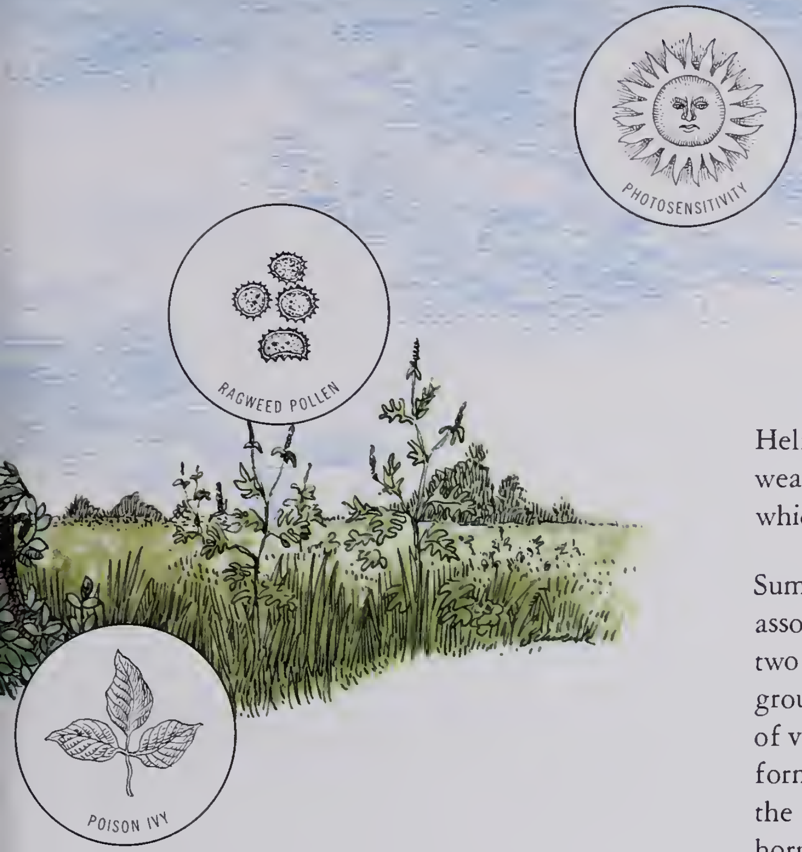
In the Spring a young man's fancy lightly turns to thoughts of—allergies. This is at least true of the 10% of the population who have hay fever and the 4% who have asthma.[1] The snow melts, the trees blossom and the noses run. Patients who were fine all winter may not be enthralled by the sight of the first robin or the blossoming of a crocus, for their appearances may precede the "sneezin' season."

Allergies in general can be divided into winter allergies and summer allergies. In the winter the main problems are inside the house: e.g. dogs, cats, dust and feathers. Houses in the northern half of the country become so dry that it becomes essential to add humidity to the home; this is a far cry from the damp summer months with the moldy basements and need for dehumidifiers.

Early in April trees begin to pollinate, with each tree having about a two week period of pollination. A particular patient may be sensitive to only one tree and thus have his hay fever for such a short time that he thinks he has a cold.[2] The entire tree season starts about April 1 and ends about Memorial Day, although all hay fever seasons are blurred and prolonged in the southern part of the country. Tree pollen is usually very heavy and a person may well have most of his exposure from those trees immediately surrounding his home.

Grasses pollinate from about May 15 until July 4, and cause "rose fever." Grass pollens are somewhat lighter and more buoyant than tree pollens, and are much more ubiquitous. While there are several varieties of grasses in the United States, they are so closely related antigenically that a person sensitive to one is generally sensitive to them all.[3] Thus, while the tree season is really several small seasons intertwined, the grass season will usually result in symptoms for a more prolonged period. Obviously, a grass-sensitive patient will have trouble only when grass is pollinating—he will have to think of another excuse not to mow the lawn after July 4.

Ragweed is the "Big Daddy" of them all in the eastern two-thirds of the country. Pollination is generally from mid-August until the end of September, with the predicted lower counts and longer seasons



in the southern part of the country. Ragweed is a very light pollen which may be windborne for hundreds of miles. An interesting study was made in New York City, in which 90% or more of the ragweed plants were destroyed in three of the five boroughs; pollen counts done during the season were virtually identical in all five.[4]

Ragweed is, of course, the most common cause of hay fever and is associated with an incredible loss of man hours from work each year. Many is the patient who travels to areas where the pollen count is low, just to avoid having symptoms. There is no ragweed anywhere in the world except the United States and portions of Canada and Mexico.

While molds are present through the year, the most important ones predominate from April until November. An old wives' tale has ragweed ending with the first frost, when actually it ends a good month earlier. It is Alternaria—the kingpin of the molds—that meets a sudden demise with the first frost. Alternaria-sensitive patients are in their glory when there is snow on the ground, and might be ideally suited to man the radar stations in Alaska. In September and October, Alternaria counts are at their highest, perhaps associated with the burning of leaves. Other molds such as Hormodendrum and Helminthosporium are associated with the warmer weather, as opposed to Penicillium and Aspergillus which are household molds.

Summer also means the return of our much maligned associates—bugs. Insects cause allergic symptoms by two methods: the bite or sting of the Hymenoptera group, and the inhalation of particles of the bodies of various insects. Wasp stings are the oldest known form of allergy, as they caused the death of one of the pharaohs in ancient Egypt.[5] Bees, wasps and hornets account for many deaths in this country, and those sensitive to them should carry special treatment kits at all times; a few minutes delay in the administration of epinephrine to such a patient, might be the difference between life and death. Inhalation of particles of insects may cause sneezing and wheezing in a susceptible individual.[6] Both of these forms of insect allergy may be benefitted by hyposensitization.

The insect recognizes no professional bounds. He is as apt to bite the physician as the patient. So this season, beware of bugs. And beware, too, of poison ivy. That pleasant stroll through the woods and underbrush with the Boy Scouts might turn into a

(Concluded on following page)

to relieve summer allergies

Triaminic®

Each timed-release tablet contains phenylpropanolamine hydrochloride 50 mg., pheniramine maleate 25 mg. and pyrilamine maleate 25 mg.

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nightmare for the botanically uninitiated in the causes of rhus dermatitis (poison ivy, poison oak and poison sumac). Although you may have been careful, your dog may not have noted that it wasn't clover he jumped through, but poison ivy. His return to your side may give you the rhus dermatitis that you so carefully avoided. That heavenly campfire may be emitting particles of rhus oil to produce an airborne contact dermatitis of the exposed areas of the body.

Another fascinating, but rather infrequent type of summer allergy is physical allergy. Some people sneeze on exposure to sunlight, while others break out in rashes, usually on the exposed parts of the body. These rashes may well follow the administration of various photosensitizing drugs, e.g. demethylchlortetracycline.[7] Another form of physical allergy and one that may be lethal in the summer, is cold allergy. Yes, I mean cold allergy, not heat allergy. The cool dip on a hot day with its consequent sudden chilling of the body, may be the coup de grace for a cold sensitive patient.[8] It is customary to write "heart attack" on the death certificate, even though the victim may have been an 18-year-old boy who looks like a Greek god.

Lest the reader be depressed by this saga of afflictions associated with the warmer months, perhaps he should remember that it is also a time for swimming, baseball, lying in the sun and taking that long-planned vacation. So let's all join in a chorus of "In the Good Old Summertime," as we sneeze, wheeze and scratch. Be careful of your suntan lotion, however; it may cause you a contact dermatitis.

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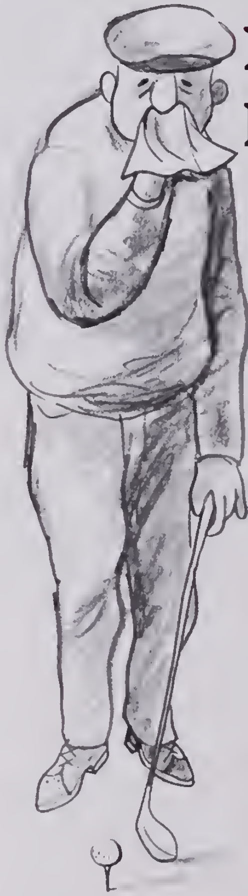
How can he be a sport with a runny nose?



For summer allergies, summer colds, or nasal congestion due to almost any cause, you prescribe quick r-e-l-i-e-f with Triaminic. It's ideal for summer allergies:

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Phenylpropanolamine hydrochloride	50 mg.
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Side effects: Occasional drowsiness, blurred vision, cardiac palpitation, flushing, dizziness, nervousness or gastrointestinal upsets.

Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

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Adipex is ideal for short term treatment of your mildly depressed patients. Its soothing, mood-elevating ingredients ease the symptoms of nervous depression, while the antispasmodic helps to control tension-induced GI distress. With your professional counselling and supportive therapy with Adipex, a normal outlook can be restored to these patients as they learn to cope with or overcome the depression caused by temporary stress.

Dosage: The usual dose of Adipex Ty-Med is one tablet or capsule daily, taken on arising.

Side Effects: Insomnia, excitability, central excitatory symptoms or cardiovascular reactions.

Precautions: Discontinue use if rapid pulse, dizziness or blurring of vision occurs.

Contraindications: Coronary or cardiovascular disease, hypertension, hyperthyroidism, hyperexcitable or psychotic states, glaucoma, or idiosyncrasy or habituation to any of the components.

Caution: Federal law prohibits dispensing without prescription.

Supplied: Bottles of 100 and 1000 tablets or capsules.

Reference: Feigley, D. M.: Office care of mild emotional distress, Dis Nerv Syst *23*:450 (Aug) 1962.

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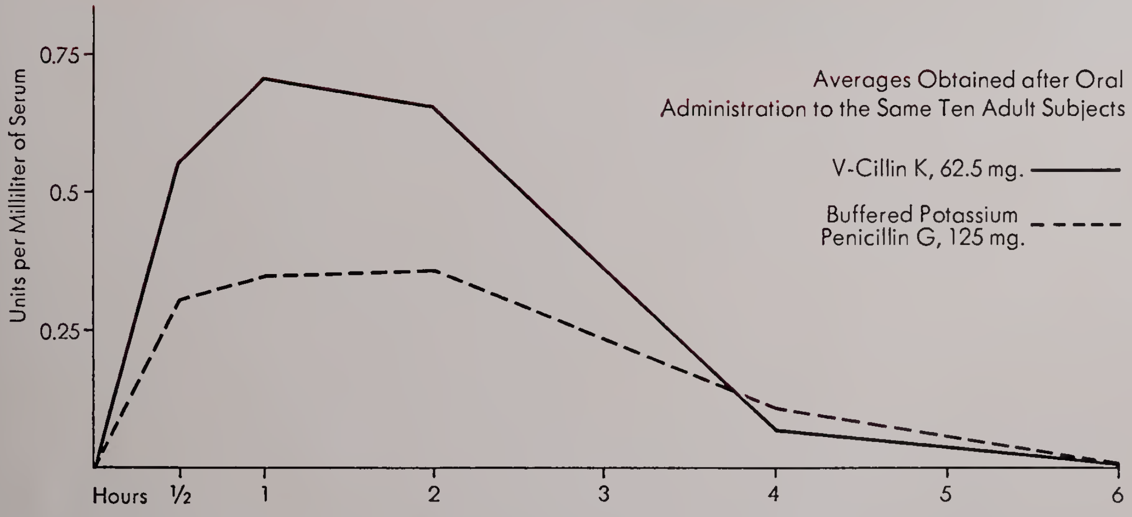
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Block, H. R.: Current Ther. Res., 6 253, 1964.

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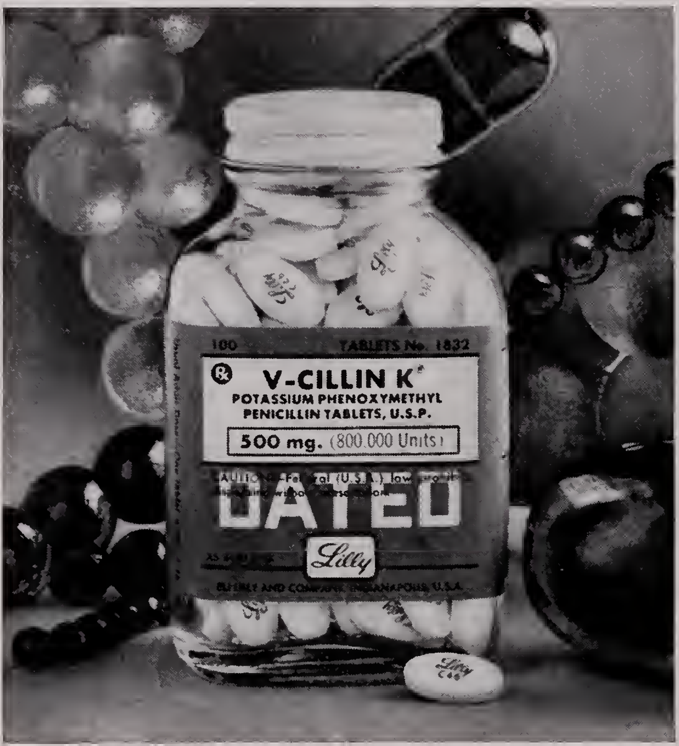
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V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,0000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [011867]

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Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

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pHisoAc is supplied in tubes of 1½ oz., also available in a combination package with a 5-oz. squeeze bottle of pHisoHex.

*Kligman, A. M., in Ludwig, G. D., and Elsom, Katherine O. (Eds.): *Am. Pract.* 13:200, March, 1962.

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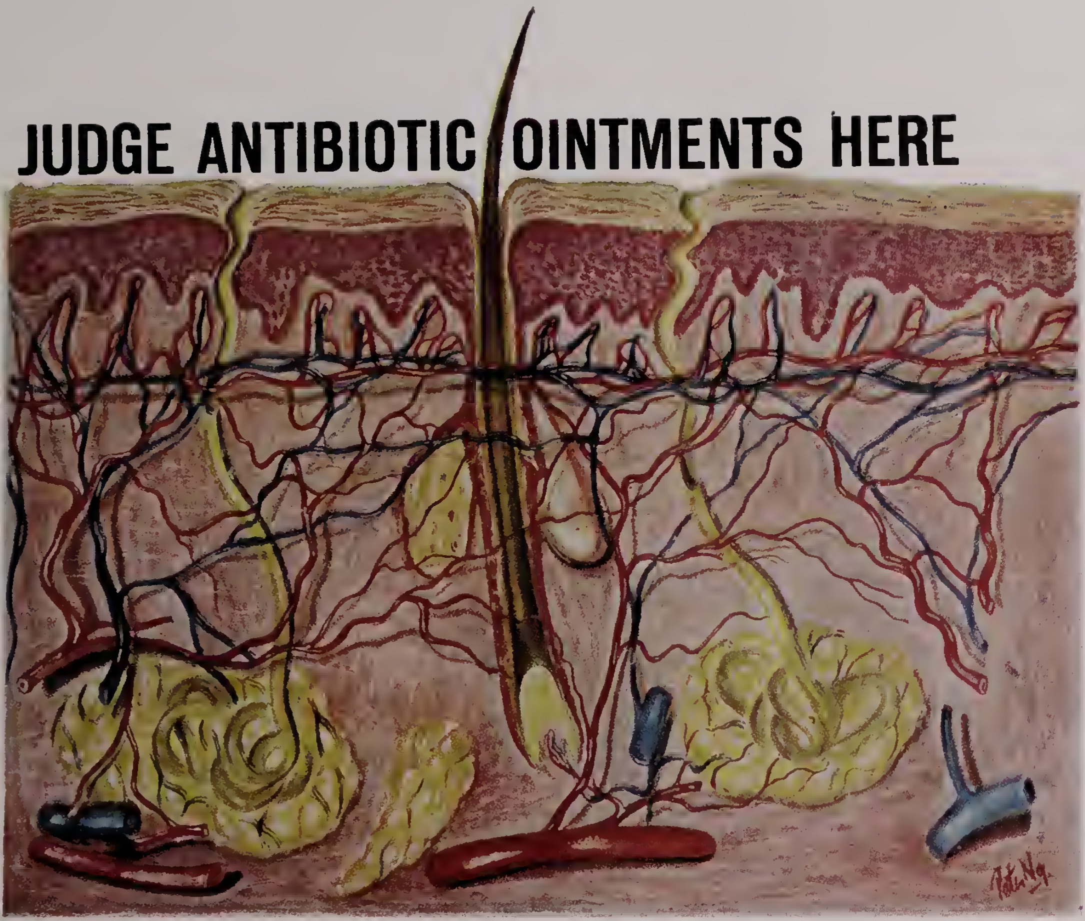

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Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

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Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—*Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions)

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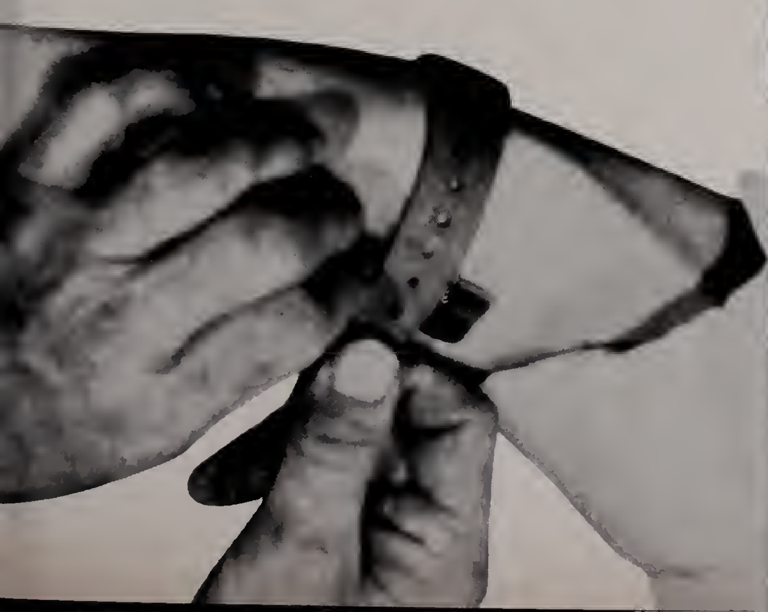

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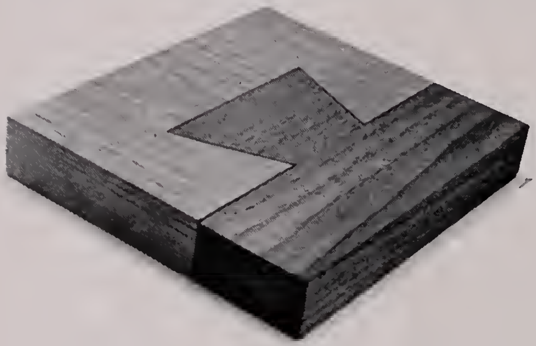
Combination Tablets



INDICATIONS: Mild to moderate hypertension, especially when complicated by anxiety, tachycardia, or edema.

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Serpasil® (reserpine CIBA)
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Because reserpine may increase gastric secretion of hydrochloric acid, use cautiously in patients with peptic ulcer.

Use cautiously with digitalis, quinidine, or guanethidine. Not recommended for aortic insufficiency.

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Contraindictions: Oliguria, renal shutdown, progressive hepatic disease, and allergy to thiazides.

Warnings: Stenosis, hemorrhage, and ulceration of the small bowel have occurred with coated potassium tablets. Discontinue such medication when used with Esidrix if gastrointestinal disturbances arise.

Pay special attention to electrolyte balance of patients with severe renal or hepatic insufficiency. In patients with cirrhosis and ascites, watch for symptoms of impending hepatic coma. Thiazides may decrease glucose tolerance; use cautiously in diabetics. Hyperuricemia may occur but is readily reversed by a uricosuric agent. Lowering of blood pressure may sometimes result in nitrogen retention, particularly in patients with impaired renal function. Dosage titration is necessary in such patients.

Precautions: Watch for signs of fluid or electrolyte imbalance. Further electrolyte depletion may cause hypochloremic alkalosis and hypokalemia. Since the latter may precipitate digitalis intoxication, watch carefully patients who are taking digitalis or its glycosides or those with cardiac arrhythmias. In severe hypokalemia, large oral or intravenous doses of potassium may be required.

A few infants born of mothers who received thiazides during pregnancy have shown bone marrow depression with thrombocytopenia. Hydrochlorothiazide decreases responsiveness to exogenous norepinephrine and increases responsiveness to tubocurarine. Hypotensive episodes under anesthesia have been observed in some patients receiving thiazides.

Side Effects: In addition to those above, nausea, anorexia, headache, restlessness, constipation, dizziness, paresthesias, fatigue, increased sweating, cramps in arms and legs, diarrhea, abdominal pain. Rare reactions: purpura with or without thrombocytopenia, skin rash, photosensitivity, urticaria. Sometimes associated with hydrochlorothiazide: leukopenia, agranulocytosis, aplastic anemia, pancreatitis, jaundice, necrotizing vasculitis.

DOSAGE
Average dosage is 2 *Tablets #2* daily. For patients requiring less hydrochlorothiazide, substitute *Tablets #1*. For maintenance, reduce dosage to lowest effective level. When necessary, more potent antihypertensive agents may be added gradually in reduced dosages.

SUPPLIED
Tablets #2 (light orange), each containing 0.1 mg reserpine and 50 mg hydrochlorothiazide; bottles of 100 and 1000. *Tablets #1* (light orange), each containing 0.1 mg reserpine and 25 mg hydrochlorothiazide; bottles of 100 and 1000.

Consult complete literature before prescribing.

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The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

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Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

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Each tablet and each 5 cc. of liquid contains:
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atropine sulfate .... 0.025 mg.

in childhood diarrhea associated with: Gastroenteritis • Spastic bowel • Influenza-like infections • Antibiotic administration

Lomotil gets children with diarrhea off toast and tea and back to normal diets and normal activity with gratifying dispatch.

Lomotil slows the rapid propulsion of overstimulated intestines, permits absorption of excess fluid and controls diarrhea with notable promptness and effectiveness.

Moreover, lowered motility achieved with Lomotil relieves the abdominal cramps and discomfort so distressing to children.

Dosage: The recommended initial *daily dosages,* given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage

3-6 mo. . .½ tsp.* t.i.d. (3 mg.)
6-12 mo. .½ tsp. q.i.d. (4 mg.)
1-2 yr. . . .½ tsp. 5 times daily (5 mg.)
2-5 yr. . . .1 tsp. t.i.d. (6 mg.)
5-8 yr. . . .1 tsp. q.i.d. (8 mg.)
8-12 yr. . .1 tsp. 5 times daily (10 mg.)
Adults: . .2 tsp. 5 times daily (20 mg.)
(or 2 tablets q.i.d.)

*Based on 4 cc. per teaspoonful.

Maintenance dosage may be as low as one-fourth the initial daily dosage.

Precautions: Lomotil is a Federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded, and medication should be kept out of reach of children. Should accidental overdosage occur signs may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and tachycardia. Lomotil should be used with caution in patients with impaired liver function or those taking addicting drugs or barbiturates.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of the extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

SEARLE *Research in the Service of Medicine*

The Doctor's Wife

If the doctor's wife is not a jewel, perhaps she is a beautiful rose. In one instance she is, for her name is the Doctor's Wife and she is the new hybrid tea rose, shown on the cover, developed for the Auxiliary of the Oregon Medical Association. She is being introduced this year, under control of the Auxiliary, to auxiliate the Med-Aux Park (rhymes with medopark) program. Her fame is bound to grow. And so will the parks.

Medical-Auxiliary Parks, abbreviated to Med-Aux Parks, or M A P, became an idea at an auxiliary meeting in Chicago, in 1965. Mrs. Howard Emmerson was listening, and thinking, when a delegate from another state reported establishment of playgrounds. Why not do something for children in schools for the handicapped? She could hardlly wait to get back to Portland to develop the plan that occurred to her that day.

She had no difficulty in building enthusiasm for the plan. With characteristic teamwork, the Oregon Auxiliary went to work, first to get approval of the Oregon Medical Association, next to establish M A P number one. The general plan was to buy and install playground equipment for handicapped children attending non-tax-supported schools. The first school chosen was the Aloha School for Retarded Children at Aloha, Oregon. It was dedicated last September, during the annual meeting of the Oregon Medical Association. Parks II, III and IV are already planned.

A variety of money raising methods were tried, including a "Stay at Home Ball" but none has been as successful, or promises as much as the "Doctor's Wife." The rose has been in great demand even though distribution has been confined almost entirely to families of physicians in Oregon. The breeder, Mr. Fred Edmunds, promises a greater supply for next year. The bushes are handled and distributed exclusively by the Auxiliary. Later, it is anticipated that the "Doctor's Wife" will be made available to other auxiliaries for their own projects.

The rose, and the Med-Aux Park program will be reported at the meeting in Atlantic City next month. The Oregon Auxiliary plans to continue vigorous promotion of the rose and the Med-Aux Parks as major, co-projects. ■

H. L. H.

The Ostrich Approach

How long will the medical profession continue to bury its head in the sand in regard to the problem of the misuse of alcohol? We were years behind the obvious in facing up to the fact that the use of tobacco is a serious health hazard. Are we going to repeat this blindness with the problem of alcoholism? The FDA, the public, and we, get greatly disturbed about the misuse of LSD, amphetamines, and marihuana, which involve relatively few people; but we take feeble if any steps toward solving a problem that involves at least 6,000,000 people and is rated fourth as a national health problem.

For the past 20 years we have deceived the public and ourselves by calling this a disease instead of addiction to a drug. Yet nearly every article written on this subject during this period uses the term "addiction" in describing the nature of this disorder. The sooner we adopt the same cold, scientific attitude toward this drug as we have toward other addictive drugs, the sooner we will do some logical and constructive thinking about its control.

The old clichés about "prohibition didn't work" and the "public demands it" haven't helped solve the problem one bit. While it is true that millions of people use it without obvious harm, it is also true that it is harmful to many organs in the body, it greatly increases the accident rate, and excessive use shortens the life span significantly. If we are not aware of this, we are far behind the insurance companies who either refuse to insure excessive drinkers or insure them only at greatly increased rates.

Not all people would become addicted to drugs if there were no restrictions on any drug. Some would avoid them completely, many would use them only as the occasion warranted. But in every society there are the immature, the undisciplined, the insecure, the depressed, the constitutionally inferior, the victim of nervous tension state, the borderline psychotic, and others, who want to escape from their maladjustment problems. Alcohol, with its social acceptance and ready availability, makes an ideal way to escape. Does anyone think that we will ever eliminate these classes of maladjusted people or teach them *how* to use an addictive drug moderately? Like the poor (in spite of poverty programs) they will always be with us. Something should be done to protect them from the misuse of this drug as we do from other drugs. In this endeavor our profession should take the lead.

Every medical society should have an active committee working on this problem. It should be attacked with the same cold scientific attitude with which we look at any disorder affecting the health of our patients. If we wish to maintain professional honesty, we must not let the fact that some of us like our cocktails, blind us to the magnitude of this problem. Some group must take the lead in making concrete suggestions to lawmakers and to the public. If we start making some reasonable suggestions for action instead of asking for more studies as to why these classes of people become addicted, the public will listen. It is past time for action, lets get our heads out of the sand. ■

HAROLD F. HOLSINGER, M.D.

Volunteers for Vietnam

Quietly, and without seeking reward other than the opportunity to be of service to people in need, a number of physicians have gone to Vietnam in the ministry of medicine. This is not the first time that physicians have penalized themselves to help others, nor will it be the last, but few times in history has an anguished country been more in need than Vietnam is today. The picture becomes clearer as one reads the letters written by Malcom Phelps, the first of which is carried in the correspondence section of this issue.

Dr. Phelps, a general practitioner from El Reno, Oklahoma, has, himself, known serious threat to health; and, when wrestling alone with the question of whether to go or to stay at home, could easily have decided to stay. But he chose to go, volunteering to be the first Field Director of the American Medical Association Volunteers for Vietnam. He is contributing a full year.

He says, "For those who have not personally seen Vietnam it is almost impossible to imagine conditions as they are today. Most of the hospitals are at least 50 years old and were built by the French during the 86 years in which they dominated this country . . . . But the hospitals still are appallingly overcrowded. For example it is usual and customary for two and at times three patients to occupy a single bed. I visited one 1,300 bed hospital that had 1,800 patients. And compounding this situation was the fact that the hospital's entire medical staff consisted of two Vietnamese physicians who were doing what they could to render care.

"It was to this setting that the American Medical Association Volunteer Physicians for Vietnam brought, and are bringing, their dedication, knowledge and skills to serve humanity—with no thought of personal gain or reward. And this service is offered at personal hardship and privation and at times personal danger. Supplies and equipment often are meager or nonexistent. The only things never in short supply are patients in dire need of attention."

The list of Northwest physicians who have served, or are serving, follows:

Philip A. Pritel, Vancouver, Washington.
  September 27, 1965-December 4, 1965; July 12, 1966-October 16, 1966
Edwin F. Leibold, Forks, Washington
  November 7, 1965-January 6, 1966
Calvin E. Gantenbein, Portland, Oregon
  November 11, 1965-January 6, 1966
Warren B. Ross, Nampa, Idaho
  December 6, 1965-February 4, 1966
William A. Johnson, Longview, Washington
  December 17, 1965-February 15, 1966; April 22, 1967-June 22, 1967
Richard N. Sherwin, Prineville, Oregon
  January 7, 1966-March 6, 1966
Robert E. Lane, Tacoma, Washington
  January 17, 1966-March 7, 1966
Marion H. Merrill, John Day, Oregon
  February 4, 1966-April 3, 1966
C. Richard Goodhope, Edmonds, Washington
  February 9, 1966-March 20, 1966
Deibert J. Miller, Walla, Walla, Washington
  February 18, 1966-April 18, 1966; January 30, 1967-March 30, 1967
William N. Pope, Seattle, Washington
  April 18, 1966-June 16, 1966
George B. Saviers, Sun Valley, Idaho
  April 18, 1966-June 16, 1966
Lauren M. Neher, Jerome, Idaho
  June 10, 1966-August 8, 1966

Edgar M. Burns, Portland, Oregon
August 5, 1966-October 4, 1966
Thomas E. Morris, Jr., Portland, Oregon
August 5, 1966-October 3, 1966
Edward S. Morgan, Pendleton, Oregon
October 3, 1966-December 1, 1966
Frederick H. Gloeckner, Buckley, Washington
October 31, 1966-December 29, 1966
Jack G. Hennemann, Seattle, Washington
December 5, 1966-February 2, 1967
John R. Boe, Grants Pass, Oregon
January 2, 1967-March 2, 1967
John O. Milligan, Fort Steilacoom, Washington
January 30, 1967-April 5, 1967
Barbara Ann Kenyon, Buckley, Washington
March 20, 1967-May 18, 1967
Louis E. Braile, Seattle, Washington
April 3, 1967-June 1, 1967

H.L.H.

Wants and Needs

What kind of medical care do people want? What kind do they need? Who shall decide what kind they get? Should they have what they want, what they need, or what someone decides they ought to have?

In spite of the fact that winds of change seem to be blowing at whole gale velocity, there seems to be no very good way of determining needs. Wants, however, having been manipulated by persuaders of various kinds, are being expressed in ways that anyone can see. Sometimes the wants people express do not coincide with what physicians think they ought to have.

Wants are frequently made evident at the ballot box. Thus, although need for the volume of medical care now being promised by government has not actually been proven, the laws currently in effect were enacted on the basis of votes, either those on record or those anticipated. It can hardly be denied that the wants exist.

Another demonstration of wants is provided by the way various kinds of medical care are utilized. Traditionally, medical care has been a personal service with the individual physician accepting his individual responsibility to his individual patient. But, no matter how desirable individual care might seem to be from the standpoint of need, wants seem to be turning from it. Groups have been able to satisfy the wants of large numbers of people and there are indications that group practice will almost entirely replace practice by individual physicians.

A somewhat surprising bit of evidence that wants are changing has been provided by a Northwest physician, writing about his practice in *Medical Economics.*[1] Mylon Buck, of Eugene, won a trip to Eleuthera, in the Bahamas, as first prize in the magazine's contest. He reported more time with his family, less time in his office and greater income. This was accomplished by increasing his office staff, turning over many of his tasks to nurses and technicians, almost entirely eliminating house calls, hospital calls and obstetrical cases. With his own time with the patient cut to a minimum, he reports seeing 50 to 60 patients in a 6-hour day. With zero time between patients and no time for telephone calls, or other distractions, this works out to 6 or 7 minutes per patient. Some physicians would question the possibility of providing high quality care at this rate, even though a whole corps of assistants be used. Dr. Buck believes he is rendering better care because he offers a highly organized practice, using much skilled help.

His article demonstrates very clearly the difference between wants and needs. Not all physicians are ready to say that this type of practice can provide the kind of medical care that people need. But it is perfectly clear that to some people at least, it supplies what they want. The same can be said for meeting the wants of those who utilize groups, clinics, hospital outpatient services and the highly scientific type of medicine practiced under the auspices of research organizations.

Should they have what they want, what they need, or what someone decides they ought to have? It seems, just now, that they are generally getting about what they want. There may be doubts about what will happen in the future. There seems to be little promise that needs will get major attention. Efforts to meet wants seem to be destined to increase, even to the point of offering to meet wants as yet unrecognized. Mass wants can be developed by mass manipulation. Is this the way to provide the best medical care?■

H. L. H.

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[1] Buck, M. L., 50 Per Cent More Income in 50 Per Cent Less Time, Medical Economics, 88-96 (January 23) 1967.

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The Congenitally Malformed

XIII Achondroplastic Dwarfism; Diagnosis and Management

THOMAS H. SHEPARD, M.D./C. BENJAMIN GRAHAM, M.D., Seattle, Washington

Most children with aehondroplasia are the result of an initial mutation, probably in the father's germ line. Once established, this defect of cartilage is an autosomal dominant. The diagnosis is based on short stature, a measurable disproportionate shortening of the extremities, and usually a larger than normal cranium. Radiological studies are quite helpful. Incomplete extension of the elbows is common. Narrowing of the nasal passages leads in most patients to some form of inner ear trouble. With careful management, most patients can be helped to lead a happy useful life.

Achondroplastic dwarfism, one of the most common causes for small stature, is relatively easily recognized, even by the layman, due to disproportionately shortened extremities and generous-sized head. Some classifications of dwarfism even begin by dividing the group into disproportionate and proportionate types. In spite of the ease of diagnosis and frequency of the condition, very little factual information is available about etiology, diagnosis, and management of this congenital defect.

The following discussion is based on a group of patients examined and managed by the senior author during the past 12 years and also on a review of the literature.

etiology

In addition to every race of man, this form of dwarfism is frequently observed in other mammals and even in the fowl.[1-3] The best recognized animal is the basset hound. Most human examples are believed to be the result of a dominant mutation which occurred in a germ cell from one of the parents. Once established, this mutation is transmitted as a Mendelian dominant which means that one-half of the offspring of the affected person will be achondroplastic. The fact that the father's age averages 38 years implicates him as the source of the mutated germ cell.[1,4,5]

Although the father's age increase is treated as an expected finding in human mutants, the present writers have had some difficulty in obtaining an explanation of this self-evident reason from our geneticist friends. It is true that the male gonad, by its physical location, is exposed more to possible external mutant agents than is the ovary. Furthermore, if the mutation occurs in a resting male spermatogonium, it will be passed along to one-half of the group of cells that result from its division. The oocyte from birth, on the other hand, is in a resting state and, should a mutant alter it in its subsequent divisions, there is only one-half a chance that the single resulting germ cell will still contain the mutation. However, several other vital and unquantitated factors enter into this mechanism; the most important of which is the rate of stem cell renewal in the testes, i.e., chances of a mutant cell remaining in the cell population of the testes.

Achondroplasia occurs approximately once in every 10,000 live births. One might expect an increased rate in the offspring of radiologists or of persons exposed to atomic warfare, but neither group has been shown to contain increased numbers of achondroplastics. In a group of 9,945 children of radiologists, there were none;[6] and in the Japanese atomic bomb study of 27,000 offspring from exposed parents, only three were identified.[7]

pathology

Reports of studies on achondroplastics have been rare and usually confined to single patients.[8-11] The fragmentary descriptions have generally emphasized that there is disruption of the cartilage growth plate. The columns of cartilage are shorter and lack the usual linear orientation. Mucoid degeneration of cartilage areas elsewhere was reported by Harris.[8] Dys-

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Part of these studies were supported by The National Institutes of Health Grant HD-02392 and by the National Foundation March of Dimes, CRCS-39.

Dr. Shepard is Associate Professor, Department of Pediatrics, University of Washington School of Medicine.

Dr. Graham is Assistant Professor, Radiology and Pediatrics, University of Washington School of Medicine.

chondroplasia would seem to be a more appropriate name than achondroplasia.

The pathology of the achondroplastic rabbit (ac/ac) has been more fully described than that in other animals or man.[12] These studies have been extended by the present authors, and, with the newer techniques of fixation and thin sectioning, it can be shown that there is generalized involvement of cartilage cells in the long bones. It seems that the cartilage cells, by sequestering themselves in their own matrix, are deprived of some essential nutrient and as a result many degenerate and die. This presumably leads to their inability to multiply and arrange the necessary lattice for bone growth. The authors are hopeful of extending this examination technique to the human.* Some investigators believe that the condition is due to a qualitative change in the cartilage matrix; however, no analyses have been reported and no abnormal urinary mucopolysaccharides have been found.

diagnosis

In only five of our 17 patients was the diagnosis considered during the neonatal period. Presumably this is because the normal newborn's extremities are disproportionately short as compared to those of the adult. A careful history is helpful in excluding certain other types of dwarfism (see differential diagnosis). The landmarks of physical development are usually attained somewhat late. Ability to hold up the head is delayed by the increased head size and relatively short neck. Over half of the patients in the present study did not walk alone until after 16 months. The time of eruption of the first tooth averaged 8 months which is normal and, generally, eruption in an individual was comparable to that of the siblings. In three of 17 patients a parent was also achondroplastic. In our group, excluding those whose parents were affected, the fathers' ages averaged only 31.5 years and the mothers' 29.4. The reason for not finding as high an age in this group as in others reported may be due to the small sample size.

Abnormal physical finding would seem obvious but, especially in the young infant or in the milder forms of the condition, measurements are useful. Evidence for failure of enchondral bone growth is evident in the small stature, Figure 1. In Figure 2, the patients in this group are shown to be 10 to 20 cm below the third height percentile for normal children.[13] Three of our patients were judged to be normal in length at birth. A more striking difference from normal is found when the distance from the superior aspect of the symphysis pubis to the floor is plotted as percentage of the total height, Figure 3.† The shortening of the nasal bone or cartilage is also a contributing feature to the typical facies, Figure 1. Determination of the span is not reliable because inability to fully extend the elbow is almost a regular feature of the condition; only one of the present 17 patients

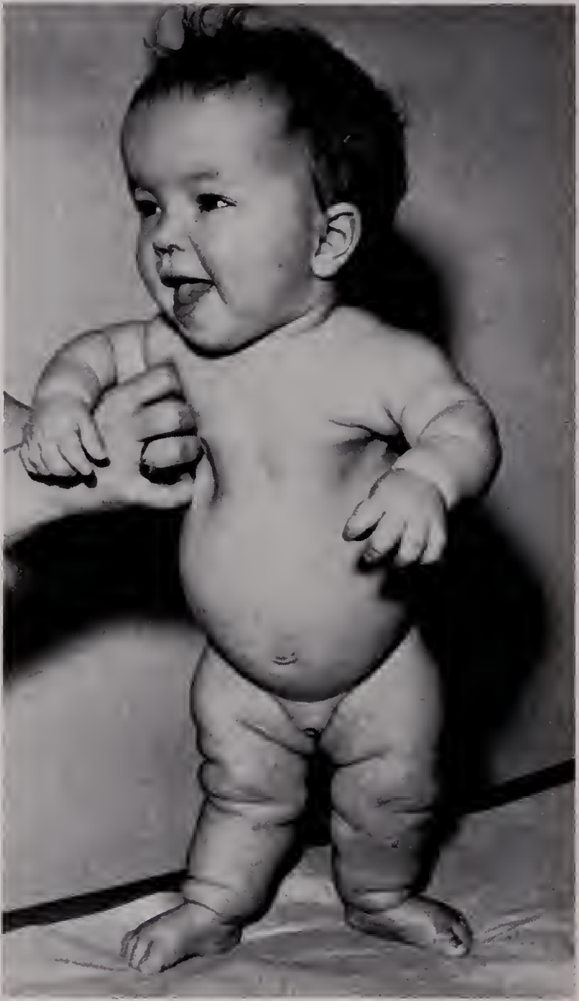

Fig. 1. Anchondroplastic child of one year. Note shortening of extremities and nose and the relatively large head. The "trident" hand is well illustrated on left. Extra folds of skin and subcutaneous tissue are seen in the legs.

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*The authors will be glad to receive any cartilage from achondroplastic patients in the Seattle area. If elective surgery is planned we would arrange to attend the operation with special fixatives.

†This measurement is done by aligning the patient against the wall with ankles together and then identifying the level of the superior aspect of the symphysis pubis. The superior symphysis usually corresponds to the faint skin fold used by surgeons to hide hernia scars. The distance from this skin marker to floor is measured in three separate maneuvers and the average figure used.

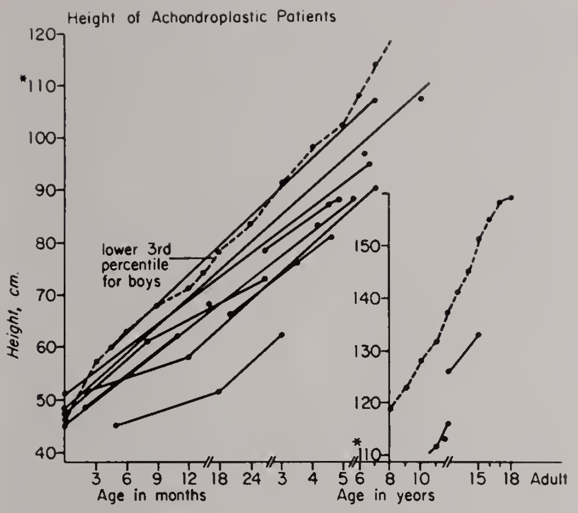

Fig. 2. The height in centimeters of 17 patients in this study. The dashed line represents the lower third percentile for normal male children.

had full extension. This finding, commented upon by Mørch, is due to widening of the distal humeral metaphysis which impinges on the extended olecranon. The widening of the metaphysis also accounts for an unnatural spreading of the fingers referred to as a trident hand. Occasionally, the ribs are shortened and involvement of their costochondral junctions may resemble rachitic beading.

Enlargement of the cranium is a common and diagnostically helpful finding. In the present group of patients only four had head circumferences that were not increased, Figure 4. Dennis, et al, have examined the cause of this megalencephaly and found that the brains were generally heavier than normal and without signs of hydrocephalus.[14] Pearse and Brown also found a proportionate increase in the brain weight of achondroplastic rabbits.[12] It is of interest that these patients have good, if not superior, intellect.

Narrowing of the nasal passages secondary to abnormal facial bone growth leads to a common chain of events; chronic nasal infection with adenoid hypertrophy, occulsion of the eustachian tubes, recurrent otitis media, and often eventual deafness. All but two of the 17 patients studied have shown some part of this cycle. In four instances, mostly the older children, permanent hearing loss has resulted. It is conceivable that some deafness could be related to intrinsic bone defects in the ossicles; information on this point has not been found.

A very wide degree of variation in severity of this growth disturbance has been seen. Some of the milder affected patients are just below the third height percentile but have measurable disproportionate shortening of the extremities and head circumferences above the 97th percentile. In general, the offspring or affected siblings of patients tend to have a similar degree of involvement. At the other end of the scale, the most severely involved child may have shortening of the ribs with decreased vital capacity and rather marked stunting of growth. This latter type patient is often rather delayed in physical development.

A variant form of achondroplasia called spondylo-epipyseal dysplasia is characterized by a delayed onset of stunting, normal head and

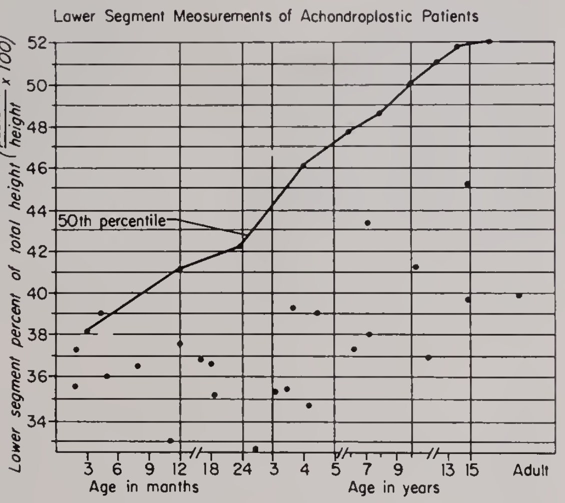

Fig. 3. The lower segment (superior pubis to floor) is represented as per cent of the total height. The line is the mean taken from the average male height and average lower segment reported from the Brush Foundation (Simmons, 1944). We consider a difference of two per cent from the mean as abnormal. Older children with disproportionately long extremities such as seen in Marfan's syndrome are usually above 54 per cent.

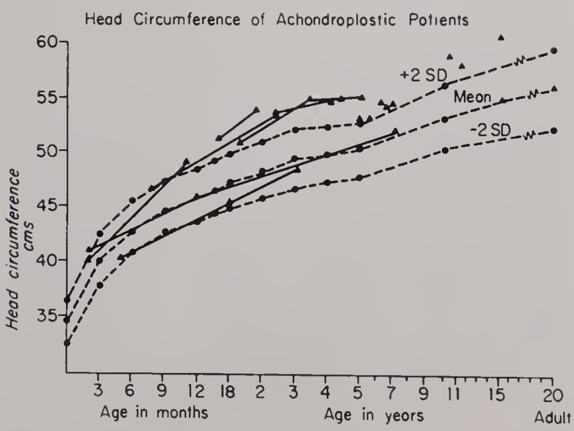

Fig. 4. Head circumference of achondroplastic patients. The dashed lines represent mean and two deviation limits for the normal female. This chart was compiled by T. H. Shepard from several sources.[13,22,23]

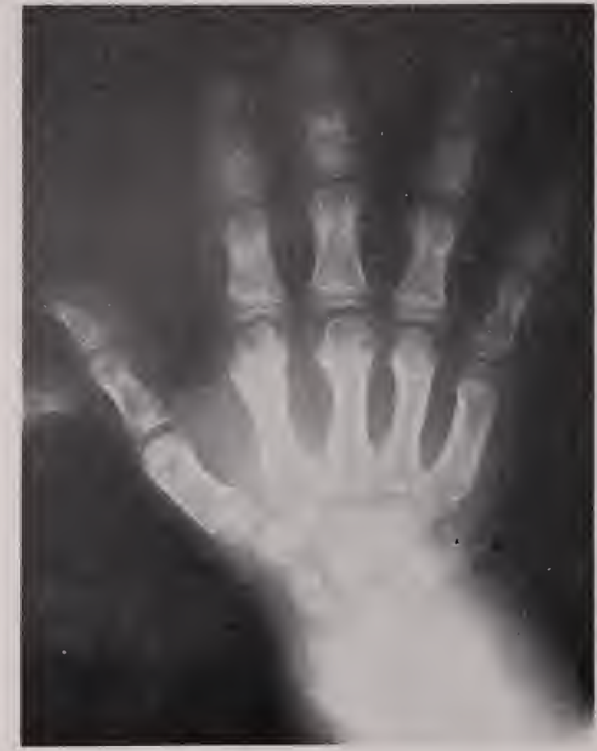

Fig. 5. Right hand of 6-year-old achondroplastic female. Bones are shortened and therefore appear relatively broad. Metaphyses cup the epiphyses, giving a ball-in-socket configuration in the metacarpals.

hands, and frequent involvement of the spinal column.[15,16] Another form found in the religious Amish sect is associated with fine, sparse, light-colored hair and is inherited as an autosomal recessive.[17]

radiologic findings

The radiological manifestations of achondroplasia are rather striking and virtually diagnostic in almost all cases. The more characteristic features have been well documented by Caffey.[18] A recent extensive review by Rubin also includes the author's work in experimentally producing the typical changes in rats by irradiating the developing cartilage growth plate.[19]

There is generalized symmetrical shortening of long and short tubular bones. Diaphyseal diameter and cortical thickness are, however, normal. This yields an appearance of relative prominence of epiphyses, metaphyses, and tuberosities. Epiphyses are frequently cupped by the metaphyses, giving a ball-in-socket appearance, Figure 5. The growth plate may even appear V-shaped as projected on the radiograph, especially in the distal femur, Figure 6. Epiphyses are sometimes irregularly mineralized in the first few years. Osseous maturation is usually normal.

In the skull, there is disproportion between the calvarium and base, with undergrowth of the latter, Figure 7. Foramen magnum tends to be small. Sella turcica is usually of normal size and shape but may be significantly elongated, even in the absence of hydrocephalus. Facial bones are grossly unaffected. However, the mandible is relatively prominent due to shortening of the skull base.

The most diagnostically useful radiographic changes are in the lower spine and pelvis, Figure 8. The iliac bones are diminished in both their horizontal and vertical dimensions, with the most obvious undergrowth being at the bases. The greater sciatic notches are markedly narrowed. In normal individuals, the lumbar interpediculate distances widen progressively caudally. The opposite is seen in achondroplasia, reflecting constriction of the distal spinal canal. The latter is also narrow in its anteroposterior diameter, with shortened pedicles and shallow

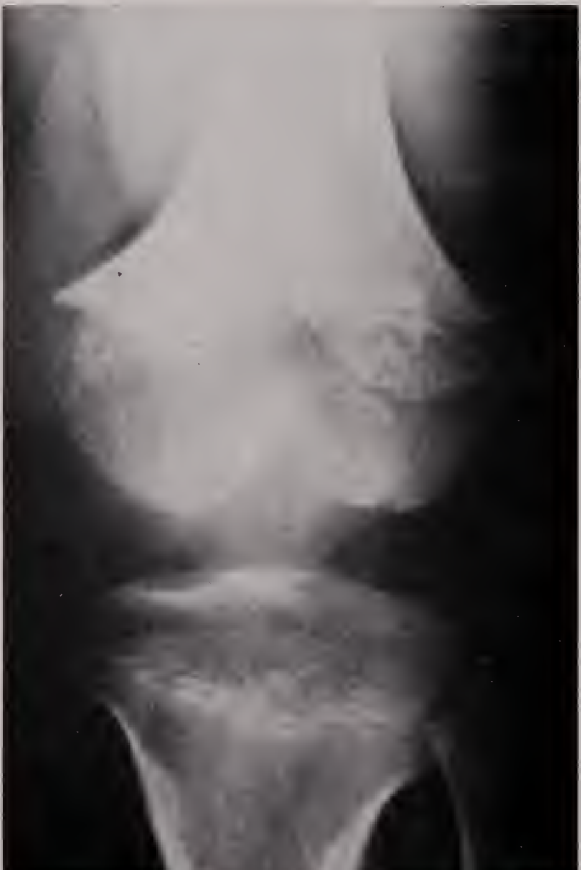

Fig. 6. Left knee. The femoral growth plate is markedly indented centrally, being an accentuation of the normal appearance.

vertebral bodies. It should be emphasized that the entire spine is involved in this manner, and the changes are simply more obvious in the lumbosacral region.

differential diagnosis

The marked disproportionate shortening of the extremities and enlarged cranium help to differentiate achondroplasia from nutritional and endocrine types of dwarfing. In patients who have hypopituitarism, the growth arrest is usually more dramatic, and other findings such as weakness, hypoglycemic spells, hypogonadism, and delayed bone maturation are present. In dwarfism due to delayed onset of puberty, rather marked delay in bone maturation and a frequent history of a parent being similarly slow in sexual development are helpful. The constitutional or primordial dwarf has normal proportions and grows at a steady rate which is below but parallel to the third percentile. Hypothyroidism is probably the most easily confused because of the severe delay in attainment of normal proportions, but the circulatory changes of pallor, cool skin, and narrow pulse pressure are most helpful in diagnosis. Also, markedly retarded osseous maturation and epiphysial dysgenesis are obvious on radiographs.

In the congenital defects of mucopolysaccharide metabolism (Hurler and Morquio syndromes), the onset is usually in late infancy, and specific radiologic and urinary chemical findings exist.

Because of stunting and widening of the ends of the long bones, various forms of rickets may be confused with achondroplasia; however, the serum calcium, phosphorous, and alkaline phosphatase are all normal in achondroplasia.

A partial list of rare congenital diseases that may bear consideration in the differential diagnosis includes: congenital phocomelia, congenital stippled epiphyses, osteogenesis imperfecta, brachyphalangia (Drinkwater's syndrome), Ollier's enchondromatosis, metaphyseal dysostosis, pycnodysostosis, cleidocranial dysostosis, Ellis-VanCreveld syndrome, and hereditary multiple exostoses. These can be excluded by appropriate studies.

management

In the absence of known etiology or even the biochemical mechanism, no specific treatment can be recommended. We are not impressed by reports of the use of human growth hormone in the condition.[20] Individual growth rates in patients from the present untreated group appear to be similar to those in the growth-hormone-treated group.

There are a number of things the physician can do to help the patients and their families. It is comforting often for the parents to understand that their own future offspring or the offspring of relatives do not run the risk of being achondroplastic. Almost no repetition in the same family *with normal parents* has been recorded. On the other hand, it is essential that the parents educate their affected children about the 50 per cent chance of achondroplasia should the patient decide to conceive.

Concerning the recurrent otitis media with

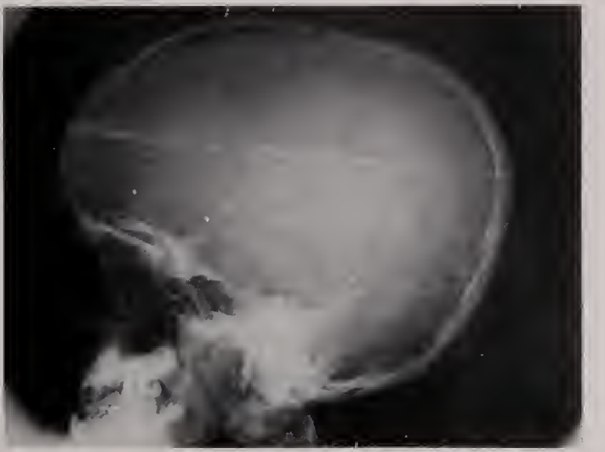

Fig. 7. Lateral skull radiograph demonstrates the relative prominence of calvarium compared to the base. Sella turcica is normal.

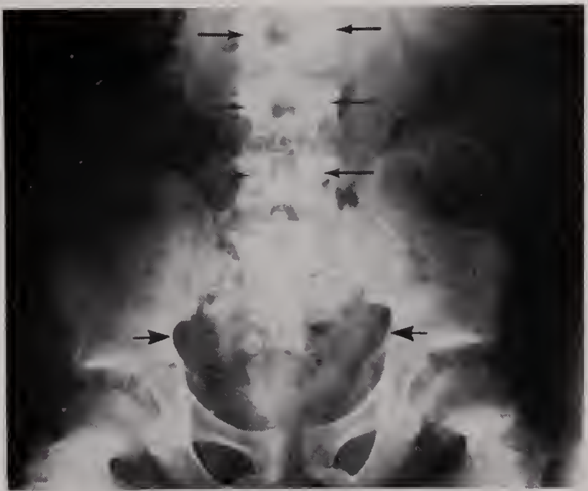

Fig. 8. Lumbosacral spine, pelvis, and hips are characteristic. Interpediculate distances (vertebral pedicules are indicated by small arrows) narrow progressively caudally, a reversal of the normal appearance. The greater sciatic notches (large arrows) are shortened.

subsequent hearing loss, a good prophylactic program, augmented when indicated by adenoidectomy, is most important.

Three of the present 17 patients have had osteotomies performed to correct severe bowing of the legs. Healing was good and the parents were pleased by the results. Two of the 17 patients have been studied by neurosurgical consultants with the possibility of hydrocephalus in mind, and in one a ventricular-auricular shunt was successfully performed.

In later life lower spinal cord compression may occur in some patients, necessitating neurosurgical intervention.[21]

Psychologic management varies greatly from family to family. Some studies carried out with collaborators have offered some helpful suggestions.[‡] Most achondroplastics develop a mascot-type of personality, thus taking advantage of their size. It is very worthwhile to allow them to remain in the same peer group during their school years. Remaining in the same school prevents the necessity of rather extensive social readjustments. Some special encouragement of the parents may be necessary to prevent overly protective isolation of the child. School problems may arise due to unrecognized hearing loss. ■

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abstracto

La mayoría de niños con Acondroplasia son el resultado de una mutación inicial, próbablemente en la linea germinal del padre. Una vez establecido, este defecto de los cartílagos is un autosoma dominante. El diagnóstico está basado en corta estatura, un medible desproporcionado acortamiento de las extremidades y usualmente un cráneo mas amplio que lo normal. Estudios radiológicos son bastantes útiles. Extensión incompleta de los codos es común. Estrechamiento de los pasajes nasales conduce en la mayoría de los pacientes hacia algún problema del oído interno. Con cuidadoso manejo, la mayoría de los pscientes pueden ser ayudados a conducir una vida feliz y provechosa.

[‡] These collaborators were Robert Burns, Clinical Assistant Professor, Director, Department of Psychology, Children's Orthopedic Hospital and Medical Center; and Dr. Glenn Strand, Clinical Assistant Professor, Department of Psychiatry, University of Washington.

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Comments on Adolescent Drug Users

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Political and socioeconomic pressures infiltrating the family and forcing the quest for status and affluence amidst an atmosphere of liberalism are prone to loosen family ties. The ensuing quantitative shifts of intraparental and parentofilial affection and demand may lead to the child's emotional or intellectual neglect, or both, or to unbearable burdening. Five constellations are observed that singly or in various combinations contribute to the development of anxiety, hostility and depression, and the defensive use of drugs. Remedial propositions are harsh but psychodynamically sound. If the family fails, public institutions must assume responsibility.

Psychoactive drugs have been used by man for thousands of years. Originally employed in connection with religious rite and medicinal prescription, they were soon taken outside the ceremonial and the sickroom for their stimulating, calming or entrancing properties. In the course of time usage has grown to gigantic proportions. For example, more than 120 million members of North American Society ingest large amounts of coffee, tea or alcohol or all three, daily, and tens of millions enjoy the smoke of tobacco. The mild, but stimulating effect of these products and perhaps their relatively easy availability make them fairly unattractive to the juvenile drug user. He seeks the sharply hypnotic properties of barbiturates, tranquilizers and narcotics, the euphoriant action of the amphetamine and cannabis derivatives and finally the ecstatic psychedelic experience of lysergic acid and other hallucinogens. The questions then arise—why are people in their teens and early twenties attracted to these poisons, and what general conditions contribute to that attraction?

I believe it to be expedient to begin with discussion of the second question, namely the examination of the general contributing factors, because it will automatically yield many answers to the first query of the specific needs.

houses on sand

Study of juvenile drug users and their backgrounds reveals a chain of sociologic factors and their influence upon the family similar to that observed in cases of general juvenile delinquency. Postwar conditions, political instability, economic changes and, particularly, a prevailing atmosphere of liberalism, provide the medium that breeds insecurity, skepticism and a sense of futility on an international scale. The wartime strain on the adaptational personality resources persuade victor and conquered alike to turn the former pursuit of the enemy into the pursuit of pleasure. The pace toward peace activities is anxiously quickened to make up for lost time; still frightened by the last and frightened anew by other current and threatening future wars, the present is seized before it will turn into a dismal future resembling the dismal past. Anxiety is countermanded by the acquisition of material goods and the insecurity denied through status directed assertiveness. Too little time, energy and interest remain available for the exacting requirements of marital and family life; mutual emotional neglect between husband and wife is extended to the childen, often rationalized or even engendered by naively or conveniently misinterpreted psychiatrogenic liberalism of child rearing. In many instances a disappointed spouse makes a child the sole target of his or her affection with the expectation of reciprocity. The following five constellations accrue from this general background.

five ways to rebel

1. The child, sensitive to the family unrest, emotional deprivation, or burdening overload, turns against the frustrating agents and the values of a society that they represent.

2. The premiums that the family or society in general place on affluence and education, chal-

lenge the youth to approach, maintain or even surpass, family standards. Poorly prepared for this obligation by the lack of discipline and particularly by the lack of sustained stimulus (that fourth-of-July-post-picnic-15-minute-catch-period will hardly suffice), he is afraid of failure and shrinks from the necessary efforts.

3. Often the over-abundance of toys in childhood and later the easy access to money, cars, clothes, sex and entertainment make the pleasure satiated individual look for new stimuli. The plastic flood of every imaginable play article has left no place for creative imagination and the fact that children of all income groups have bikes, swings, skates and doll houses blunts their appreciation of property and values. The early conditioning to passive receptivity has deadened initiative and worst of all, enthusiasm. Neither material goods nor intellectual vistas hold any attraction. A libertine morality makes love a rare commodity and sexuality a utilitarian practice. The cube has it over cupid.*

4. In other instances the discrepancy between the potential of the child and the demands of an overly ambitious or very successful parent may discourage the youngster from deploying his natural resources. At best he may indulge in dreams of glory, but carefully avoid putting himself to the test lest he face a crassly disappointing reality. This unwillingness to expend energy and the ensuing absence of success generate anxiety, guilt feelings, loss of self esteem, and inevitably, various depths of depression. In defensive anger the adolescent scoffs at social rules and takes flight into expedient impulse satisfaction, that flattering academic synonym for the descriptive "wising off."

5. Progressing economic and ideologic emancipation of women has in countless families allowed or forced a passive husband to yield the leadership of the family to his wife. Since the children pattern themselves after the stonger parent, the boy finds himself in the dilemma between family conditioned feminine identification and society's contempt of the effete male. Many boys try to solve that conflict by the reactive brutality of their behavior, and by forcefully estranging themselves from the family. Others, less inclined toward uncouth delinquency, prefer the more elegant method of chemical warfare against maternal envelopment. Many of them let their hair grow long, allegedly as sign of personal freedom in protest against family regimentation. Actually this uniformed symptom grants sheltering membership in the group of similar family fugitives and, most important, it perpetuates graphically the identification with mother by more than just a hair. Eventually, with advancing years, and glandular cooperation, whiskered assertiveness will tend to cover face, fear and femininity.

more sensuous satisfaction

Basically, from a causal point of view, there is no great difference between a trip in a stolen car and a "trip" with a sugar cube. Both contain the elements of juvenile delinquency. The use of drugs, however, yields more sophisticated and sensuous satisfactions than the more primitive pastime of slashing tires or lifting a pair of nylons from a counter. We find, therefore, that the drug delinquent is on the average a bit less robust, a bit more urbane and perhaps a bit more intelligent than his or her blunt juvenile counterpart. Needless to say that the two types are not at all mutually exclusive. I should mention in parenthesis that severe disorders of the schizoid or schizophrenic variety must be held accountable in some instances. Their number, however, is statistically insignificant and probably does not exceed one per cent.

Drugs are taken for sedative, euphoriant or psychedelic effects. The latter two are usually preferred. Irrespective of their pharmacological action their very use imparts the greatly coveted adult status, but of a more refined quality than that attained with bourgeois beer, whiskey and cigarettes. Playing grownup means to the adolescent—and to him it is a very serious game—that he is not weak, that he is not inadequate, that he is not helpless. He has approached the first pharmacologic encounter with considerable anxiety and has, through the consummated experience, conquered his anxiety. He has had success.

In addition to the arousal of and pleasurable relief from anxiety there is the conquest of an illicit act and the triumph over the restraining background authorities. This enjoyable, temporary disavowal of the inhibiting forces of conscience, the superego, accompanies all subsequent experiences. While this victory, too, enhances the fantasies of accomplishment and being adult, the psychedelic effect of certain pharmacals does so on a considerably more intensive level. The unique sensation of exclusively mental awareness without the encumbrance of the body is described as an achievement exhilaratingly compensatory for the depressing injuries and deficiencies of sober everyday existence. In other words the absorbing, unusual phenomena imparted by the intoxication with lysergic acid and other hallucinogenic compounds serve indirectly as antidepressants. Not only do they distract, but elevate their user above his pitifully impoverished life.

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*LSD is sold on the black market contained in sugar cubes.

The contrast between reality and drug induced trance becomes increasingly painful, and the return to the state of oblivion increasingly desirable, whether with LSD or the euphoriants amphetamine and marijuana. Not only do mundane affairs, such as school, jobs, parents, teachers, seem conveniently insignificant, but one's power seems to swell to superior proportions; one is above all this, one can do anything, one is blissfully omnipotent and of course one wants to re-establish this pseudostate of no affairs again and again; in short—to use the vernacular—one is "hooked."

The further the youth removes himself from family and duty and the more he becomes habituated to drugs, the deeper grows his distance from society, his loneliness and his depression. By identification with other drug users he seeks to establish fellowship, which should grant the permission for similarly licentious behavior and simultaneously the comfort of belonging to a group, a family as it were, that is less demanding and more accepting than his own.

Now, after we have delineated the cause of juvenile drug use essentially as a defense against anxiety and depression mediated by socioeconomic factors and their pressures within the family, there looms the big question 'what to do'?

dangers

First of all we should take issue with the repeated indignant questions: 1. What is so bad about using drugs? They are fun and do not hurt anyone, at least no more than alcohol hurts adults. 2. Does anyone have the right to interfere with the strictly private affair of a harmless indulgence?

The following answers may be used in rebuttal: Even in the absence of well established evidence of temporary or permanent cellular damage, the danger exists that habituation to the amphetamine and cannabis derivatives may lead into addiction to narcotics with the tragic results of physical and moral deterioration. Tranquilizers, marijuana and LSD interfere with driving, vocational and scholastic activities. They alter judgemental powers. While under LSD, the imagined power to fly, walk the waves, stop traffic, has ended in death in several instances. On record are many cases in which LSD triggered severe psychotic episodes that required hospitalization. A great number of users steal money from their parents for the obvious purpose of paying the pusher. They steal time from school and homework to devote an average of from 3 to 5 hours per session to the drug effect.

Recognizing these dangerous consequences and, much more important, the presence of pathogenic motivation, society, at least in its present structure, has not only the right, but the obligation to halt the symptom and to combat the cause. We must not be naively utopian and assume that endeavors at public enlightenment through word and print will reach all families concerned or alter conditions in the right direction. Psychiatric therapy, no matter how desirable, particularly in combination with family counseling, is available to but a very small number of cases. Private care is too expensive and the waiting list of public agencies too long to be of more than sporadic assistance. And, to be sure, some families reject psychiatric help indignantly and categorically. Two remedial measures are submitted. They are radical, but in my opinion psychodynamically sound.

substitute for family control

If the modern, democratic family, preoccupied with hierarchical, political and economic exigencies cannot serve as model of stability and cohesiveness and if it cannot provide optimal amounts of discipline and stimulus, public institutions must assume family-supportive-complementing, or correctional, functions. 1. In addition to intensive police efforts to find drug source and user, I would advocate stringent measures for rehabilitative as well as for deterring purposes. I have seen the effectiveness of such adamant methods in several instances and I have also seen how compromising bails, attorneys and judges defeated the purpose of representing a non-corrupt society to an already defeated youngster. Special drug colonies with school and work programs could be readily established as extensions of existing state facilities. To start and maintain such extensions would require only administrative initiative, very little extra personnel and no new buildings. 2. My second proposition is even more harsh than the first. It concerns the school system. The school is an institution which has the unique opportunity to exert a desirable influence on the child during his formative years. At the present time this potential is still hamstrung by the tendency to deceive grammar school children about the serious business of education by too much play and too low a demand level; the high school student may conveniently add too many credits from an enticing array of easy, non-academic subjects to an unproportionately comfortable minimum of obligatory "solid courses."

A girl, senior in high school, referred by the Juvenile Court, enumerated her curriculum as follows: Language-Arts, Washington State history, sewing, cooking, physical education and early dismissal. She had plenty of time for curfew violation. Her parents didn't care. So, what was wrong with going out at night?

Legislation could easily stop the irrevocable waste of time and energy, curb the superficiality of approach, and impart the value of and pleasure from effort and endurance. A prudently authoritarian school will not stifle the child's spontaneity or foster rebellion. On the contrary, a serious curriculum will convey to the child the underlying sustained interest and care. It will help form a superego which, averse to corrupting escape, will accept intelligent structure, enjoy self control and be confident in productivity. ■

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abstracto

La inflitración de presiones políticas y socioeconómicas en la familia y el forzamiento en la busca de un status y la afluencia en medio de una atmósfera de liberalismo predisponen al aflojamiento de los lazos familiares. Los resultantes cambios cuantitativos de la afección intrapaternal y paterno-filial y su demanda, puede conducir a la negligencia emocional o intelectual del niño, o a ambas o a un insoportlable agobiamiento. Cinco constelaciones son observadas que individualmente o en varias combinaciones contribuye al desarrollo de ansiedad, hostilidad y depresión y al uso defensivo de drogas. Proposiciones para el tratatamiento son severas pero psicodinamicamente sensatas. Si la familia falla, instituciones públicas deberían asumir la responsabilidad.

Epidermoid Cyst of the Spleen

Diagnosis by Photoscanning

HERMAN R. ANSINGH, M.D., Auburn, Washington / JOSEPH E. STAPLETON, M.D., Seattle, Washington

An epidermoid cyst of the spleen in a 10-year-old girl was diagnosed as a benign cyst by preoperative scan using technetium-sulfur colloid. This is the 45th epidermoid cyst of the spleen to be reported.

Judging by paucity of reports in the world literature, cystic tumors of the spleen are seen infrequently. Of the cystic lesions reported, epidermoid cysts are only a small percentage. To date, only 44 cases of epidermoid cysts of the spleen have been reported. We believe the case we are reporting to be the 45th.

classification

Splenic cysts are classified in two large groups, true, or primary, and false, or secondary.[1] The true splenic cysts have a specific cellular lining membrane while the false, or secondary cysts, have no specific cellular lining. The incidence of pseudocysts is about four times that of true cysts[2] and they are generally traumatic, degenerative, or inflammatory.

Primary splenic cystic tumors are congenital or neoplastic. Of the neoplastic true cysts, those of angiomatous origin constitute the majority. Others in the primary group require careful classification. Included are the epidermoid cysts and the dermoid cysts, the latter being extremely rare but easily identified. The dermoid cyst is at least partially lined with stratified squamous epithelium and there is more or less accurate reproduction of normal ectodermal structures such as hair, sebacious glands, and sweat glands. Presumably, they arise from inclusions.

Pathogenesis of epidermoid cysts is more obscure. One theory is that of autochthonous formation by which mesodermal cells are assumed to be capable of forming products of either of the other two germinal layers. Another is the theory of embryonal misplacement with subsequent metaplasia.

These tumors contain neither hair nor sebacious material—only stratified epithelium; but the distinction between stratified squamous epithelium and transformed mesothelium or endothelium cannot always be made. The term *epidermoid* is confusing when applied to splenic tumors because it implies origin from epithelial precursors, a circumstance not yet proven beyond doubt. Of the various theories advanced, the most logical appears to be that of origin from multipotential cells.

Of the 44 cases of epidermoid cyst of the spleen previously reported, the majority have been in the young age group and there has been a slight preponderance of females.[3]

First case of splenic cyst was reported by Andral in 1829.[4] Only 265 cases could be gleaned from world literature by Fowler who presented a review and classification in 1953[5] but 11 years later Qureshi collected reports of 435 cases.[6,7]

CASE REPORT

A 10-year-old girl was first seen in May, 1966, because of rapid development of a mass in the left upper abdomen. The child was in excellent health and had not had any subjective complaint. Two years prior to examination, she had fallen off her bicycle and fractured the right thigh, but made an uneventful recovery.

One month prior to examination, she had been hit in the abdomen by a baseball bat. The injury was considered quite insignificant.

Physical examination revealed a healthy, 10-year-old girl in no distress. There was an easily palpable mass, reaching to five fingerbreadths below the left costal margin, that had all the characteristics of an enlarged spleen. Laboratory tests, including bone marrow study, stool examination, urinalysis, and blood count all gave results within normal limits. Upper and lower GI series revealed no abnormalities other than an extrinsic mass displacing the stomach

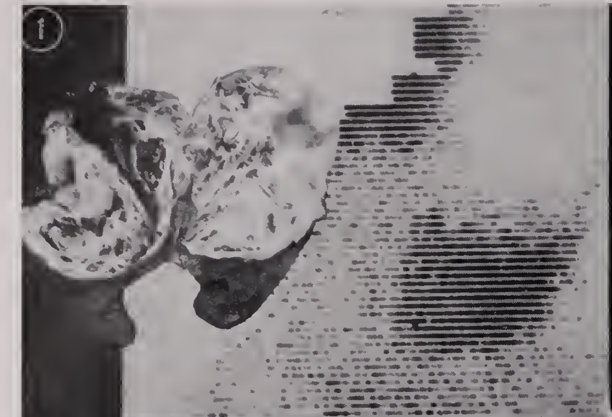

Fig. 1. Gross appearance of the opened spleen cyst, superimposed on the spleenscan. Dark area in scan represents normal spleen tissue and liver.

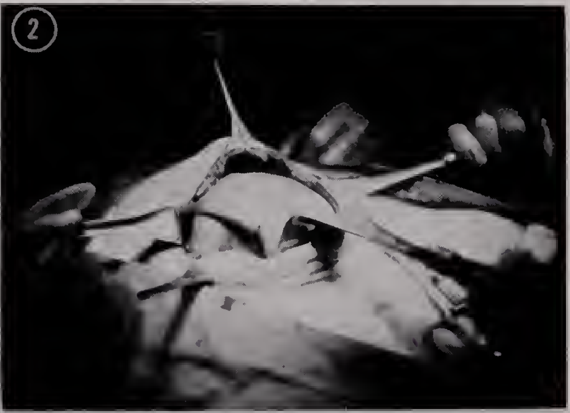

Fig. 2. Appearance at surgery, showing large cyst with downward displacement of normal appearing remnant of spleen.

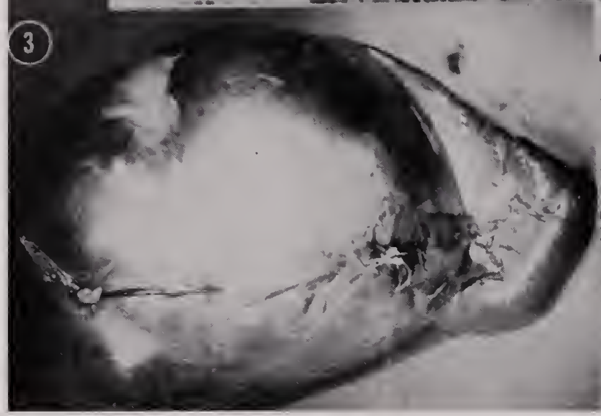

Fig. 3. Unopened epidermoid spleen cyst weighing 1,000 grams with remnent of normal spleen.

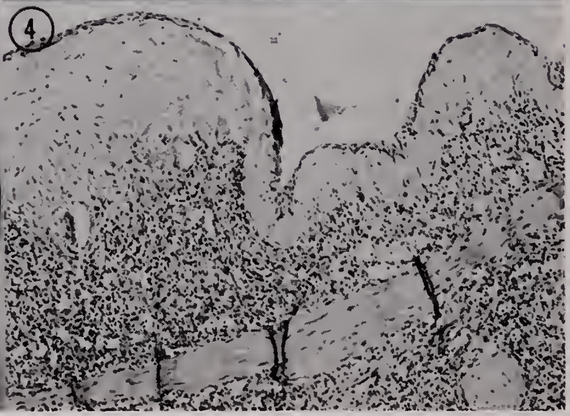

Fig. 4. Photomicrograph showing lining of stratified squamous epithelium.

to the right. A preoperative diagnosis of traumatic false cyst of the spleen was made.

A spleen scan done at the Tumor Institute of the Swedish Hospital, using technetium-sulfur colloid, ^{99m}Tc, indicated that the major part of the spleen was occupied by a mass containing no reticuloendothelial tissue, and that there was only a small remnant of normal spleen at the lower pole. The liver was small and showed no space occupying lesions, Figure 1.

The child was taken to surgery on May 16, 1966, and under general anesthesia, through a liberal left subcostal incision, the spleen was removed, Figure 2. Findings were exactly as predicted by the spleen scan. The upper portion of the spleen was replaced by a large cystic mass with a small remnant of normal spleen remaining in the lower pole. The entire specimen, weighing 1,000 grams, was found to contain a large cystic space filled with clear amber fluid, Figure 3. Lining of the cyst showed trabeculation in the form of gray streaks of fibrous tissue.

Microscopic examination revealed a lining of mature epithelial cells arranged in single layers and, in places, several layers, showing obvious squamous features. There was frequent direct association with the underlying splenic pulp which showed foreign body giant cell reaction, crystalline deposition, and focal areas of calcification. The splenic tissue itself showed the usual histologic features, Figure 4. From the microscopic appearance we believe that the cyst should be classified as a congenital epidermoid splenic cyst. Whether trauma played any role is debatable, although trauma is frequently mentioned in case reports of primary splenic cystic tumors. The abdomen was explored in detail and no other abnormalities were found. The liver was entirely normal.

The patient made a most uneventful recovery and was discharged on the sixth hospital day.

comment

The pre-operative diagnosis of the benign cystic spleen in this case, using photoscanning, was most gratifying. We consider it a valuable tool in the diagnosis of obscure upper abdominal masses.[1,8,9]

Spleen scanning has been routinely performed for several years, first with ^{51}Cr tagged red cells damaged by gentle heating, more recently for a period with MHP (1-mercuri - 2 hydroxy-propane) using ^{197}Hg or ^{203}Hg, and recently with technetium–sulphur colloid, ^{99m}Tc. The latter agent is the only method presently used by us at the Tumor Institute of the Swedish Hospital, the technique being much simpler than the use of heat damaged red cells, and MHP having been withdrawn for a time from the market.

Technetium-sulfur colloid, ^{99m}Tc, is simply made by heating an acidic solution of sodium thiosulfate in the presence of pertechnetate ion using Dextran as a colloidal stabilizer. Its routine preparation takes ten minutes. Technetium emits solely a 140 KEV gamma ray and has a half-life of six hours; the organ and whole *body* dose is thus low when compared to other radiopharmaceuticals.

When technetium-sulfur colloid is injected intravenously, most of the colloid is trapped by the reticulo-endothelial system in the liver, but some is also trapped by the spleen, making spleen scanning feasible. Scans may be routinely obtained in the prone or lateral positions. Since the energy emission of ^{99m}Tc is comparatively low, scanning of the spleen in the AP position is difficult if the spleen is small and there is no interference with the blood supply to the liver. In the case under discussion, the spleen was enlarged clinically and, consequently, no difficulty was experienced in obtaining a useful scan.

Since the introduction of the gamma camera, spleen scanning is carried out routinely in association with liver scanning since the amount of radioactive material in the spleen is increased with diminution of blood supply to the liver. Spleen scanning per se is performed comparatively rarely and is most called for in the differential diagnosis of left upper quadrant abdominal masses, or the quantitative assessment of splenomegaly. With either the gamma camera or the rectilinear scanner, it is estimated that the *limit* of resolution in the spleen is approximately 0.7 inches with ^{99m}Tc.

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abstracto

Un quiste epidermoide del bazo en una niña de 10 años de edad fué diagnosticado como quiste benigno antes de la intervencioñ quirúrgica por medio de los isótopos radioactivos usando coloide de sulfuro y technetium. Este es el 45avo quiste de bazo que se reporta.

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Falciparum Malaria in the United States

Report of a Case in a South Viet Nam Veteran

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Plasmodium falciparum causes more than 90 per cent of the type-identified malaria seen in Southeast Asia and relapse will be seen occasionally in returning veterans. Falciparum malaria differs from the classical variety and may be deceptive. Fever is protracted and may resemble that of typhoid or temperature may be subnormal. Symptoms may indicate organ system involvement when parasites obstruct capillary flow and cause toxemia. Any veteran returning from Southeast Asia who is ill should be suspected of having the disease. Parasites may be resistant to the newer antimalarials. If so, quinine should be used.

This is a description of falciparum malaria occurring in the United States in a young adult male recently discharged from the military forces who had previously served in Southeast Asia. The case is reported for the following reasons: 1. The patient was extremely ill with the parasitic infection and probably would have died without quinine therapy. 2. The illness developed in spite of continuing weekly suppressive doses of chloroquine and primaquine. 3. Therapeutic doses of chloroquine did not result in significant clinical improvement or disappearance of parasitemia, (chloroquine resistant parasite). 4. Additional cases are likely to be seen, by civilian physicians in the United States, in men discharged from the Armed Forces and such cases could serve as a focus initiating the disease in this country.[1]

report of a case

A 22-year-old white male was admitted to the Veterans Administration Hospital, Spokane, November 2, 1965, in stuporous condition. He could be roused to apparent consciousness, but was unable to give a satisfactory history. Relatives said the patient had been living with them since discharge from the Army 10 days prior to admission. His last tour of duty was for a period of two months in South Viet Nam. Subsequent questioning of the patient after recovery indicated that he had continued to take weekly suppressive anti-malarial therapy with chloroquine and primaquine following his departure from South Viet Nam. Upon arrival in the United States he was seen at a dispensary in California because of malaise and fever, but was not hospitalized or studied further. Upon arrival at their home 10 days before admission his relatives indicated that he complained of weakness and abodminal pain. A fever of 102 was found. Mental confusion then developed. On the day of admission a generalized clonic seizure occurred during which he was incontinent of urine. It was followed by coma.

Physical examination on admission showed an acutely ill, well developed young white male whose level of consciousness was that of stupor. The vital signs were: temperature 103, pulse 132, blood pressure 112/50, respirtations 44. EENT examination showed no abnormality except dryness of mucous membranes of the mouth. The heart and lungs were normal except for tachycardia. There was general tenderness in the abdomen, especially in the upper part. The liver and spleen were not definitely palpable. The neurological examination showed hyperactive deep tendon reflexes with clonus in the lower extremities. The plantar response was normal.

Admission laboratory findings were as follows: Spinal fluid clear with no cells. Initial hemoglobin 4.2 gm/100 ml, hematocrit 16, white blood cell count 3,700, neutrophiles 53, bands 6, lymphocytes 39, monocytes 2, reticulocytes 7.2. Platelets were described as adequate. Serum bilirubin 0.6 mg/100 ml, serum glutamic oxaloacetic transaminase 87, BUN 22 mg/100 ml. Urine showed 10 to 20 RBC and 4 to 6 WBC per high power field, no albumin or sugar, specific gravity 1.006, and benzidine test-negative.

In addition, blood smears, both thick and thin, showed numerous parasites, Figure 1. Because of the large numbers of parasites, multiple trophozoites in single red cells, and the history of the patient's geographic area of duty, a diag-

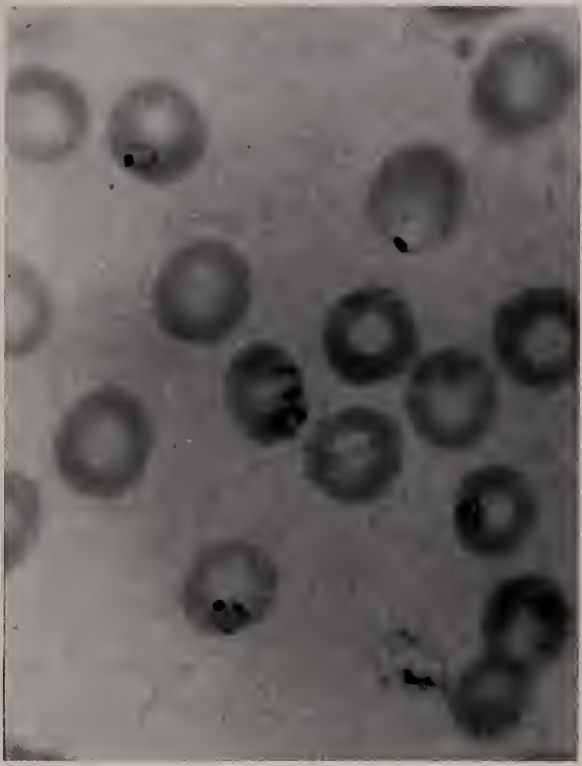

Fig. 1
P. falciparum (trophozoites)
Peripheral Blood
Giemsa Stain x 1783

nosis of falciparum malaria was made. Subsequent review of slides of the patient's peripheral blood by the Communicable Disease Center of the Public Health Service in Atlanta, Georgia, confirmed this diagnosis.

On the day of admission chloroquine was administered in an initial dose of 1.0 gm followed by 0.5 gm in six hours, then 0.75 gm every 12 hours for four doses, Figure 2. The patient was given his first dose of chloroquine at 10 o'clock on the evening of admission November 2, 1965. By November 4, 36 hours after admission, he was still febrile and smears of peripheral blood continued to demonstrate malarial parasites. His clinical condition improved in that he was less stuporous. Other therapy included parenteral fluids and 6 units of whole blood. It was concluded that the parasite showed relative chloroquine resistance. Quinine sulfate was then administered at a dose of 1.0 gm every 12 hours for the next five days. The parasites disappeared from the peripheral blood, temperature became normal and clinical recovery occurred. Two weeks following completion of quinine therapy fever and malaise recurred and blood smears for malaria were again positive.

Retreatment with quinine at a dose of 1.0 gm at 8 hourly intervals was carried out for two weeks. In addition, pyrimethamine was administered, 25 mg at 12 hourly intervals for four doses, then once weekly for the next six weeks. Prompt clinical remission occurred although parasitemia continued to be present for five days.

The patient was examined three months later. Hemoglobin was normal and no parasites were present in smears of the peripheral blood. There have been no recurrences of symptoms suggestive of malaria.

discussion

Drug resistant falciparum malaria has been reported from Southeast Asia, including Malaya, Thailand, and South Viet Nam.[2-4] The pattern of drug resistance is somewhat variable, the reports indicating resistance to chloroquine to be common but during the attack some patients responded to pyrimethamine, and others did not. Other drugs evaluated, and found unsatisfactory for this type of malaria, included quinacrine, hydroxychloroquine, and chloroguanide. Some strains of *Plasmodium falciparum* from South America have been reported susceptible to chloroguanide.[5] In general, data reported indicate that administration of quinine will control an acute attack of malignant tertian malaria, although disappearance of fever and parasitemia may take up to six days. The need of new drugs for falciparum malaria has been commented upon recently.[3]

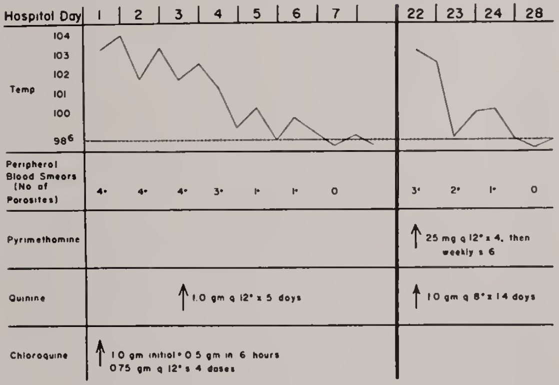

Fig. 2

Information from the Surgeon General of the United States Army points out that clinical malaria identified in Southeast Asia at present is due to *P. falciparum* in over 90 per cent of cases.[6] The current chemoprophylactic program is a combined tablet administered weekly containing chloroquine base, 300 mg and primaquine base, 45 mg. This has been considered successful in suppressing *P. vivax* infections in this geographic area.

Clinical experience in the United States with falciparum malaria has not been part of disease problems encountered by most physicians. (Following World War II and the Korean War, a certain number of veterans with relapses in *P. vivax* were seen.) For this reason, a brief review of the clinical picture of falciparum malaria is in order.

Falciparum malaria frequently does not appear in the classical form, namely, paroxysmal chills, headache, sweating and fever, followed by an apyrexial period and return of clinical well-being.[9-10] The fever is often more protracted and may remain elevated for a number of days with a typhoid-like pattern. Chilliness rather than shaking chills is more often seen. Some patients may not have fever or may have a subnormal temperature. Localization of a large number of parasites in various organ systems obstructing capillary flow and causing toxemia tend to make clinical symptoms referable to one or more organ systems. For example, severe gastrointestinal symptoms may develop including diarrhea, that suggest a primary disease of the bowel. Engorgement of the liver and spleen may result in considerable upper abdominal distress. Involvement of the lung has suggested a so-called pneumonic type. Most highly publicized have been the cerebral manifestations of falciparum malaria where obstruction of capillaries in the brain may result in focal neurologic signs, marked disturbance in consciousness varying from delirium to coma, and extremely high fever. In short, individuals recently in Southeast Asia who become ill should be suspected of having this disease, and it has been our practice to perform malaria smears on all such individuals following entry to our hospital.

One complication that was not seen in our patient is the development of acute, intravascular hemolysis resulting in hemoglobinuria. Current recommended treatment of this complication (called black-water fever) is as follows: Alkalinization with sodium bicarbonate to decrease hemoglobin cast in the kidney tubules, mannitol, and hydration to stimulate and continue satisfactory diuresis.[6] If a test infusion of mannitol does not result in increased urine flow, the patient must be treated as one with acute renal failure. Packed red blood cells are infused to correct anemia as needed.

For the treatment of the parasitemia due to *P. falciparum* the following program dated December, 1965, is recommended by the Office of the Surgeon General:[6]

> In patients who are gravely ill, or who have not responded to chloroquine treatment, or have a clinical relapse despite a previous response to a course of chloroquine, the treatment of choice is quinine. This is administered as quinine sulfate 1.0 gm (three tablets of 5 grains each) three times daily for two days, followed by 0.65 gm (two tablets of 5 grains each) three times daily for the next eight days. Because of a variable tendency to develop postural hypotension, patients should be kept at bed rest during quinine administration. The urine output should be measured and if oliguria develops, quinine should be temporarily discontinued. During oliguria, quinine blood levels rise precipitously and acute quinine toxicity ensues.
>
> When the patient is unable to retain quinine, because of vomiting, or when coma, presumed due to falciparum malaria, is present, the drug must be given intravenously. It must be emphasized that this treatment carries a serious hazard and should be resorted to only when the patient's condition clearly warrants the risk and no other form of treatment is possible. Quinine is administered intravenously as the dihydrochloride, 600 mg in 600 cc of normal saline, by very slow intravenous drip over a period of at least 30 minutes, with constant monitoring of the blood pressure and pulse to detect hypotension or arrhythmia. The same intravenous dose may be repeated at intervals of six to eight hours if the patient's condition requires. Oral therapy, by stomach tube if necessary, should be utilized as soon as possible.
>
> Patients who relapse after quinine therapy should be retreated with quinine as described above. If necessary, the course of quinine may be maintained for 21 days at a dosage of 0.65 gm (10 grains) three times daily, as tolerated.
>
> If patients who respond clinically to chloroquine or quinine, but in whom asexual parasitemia persists or recurs, the patient should receive a course of pyrimethamine 50 mg daily for three days concurrently with sulfadiazine, 0.5 gm every six hours for five days.

Other authors also emphasize the use of quinine in *P. falciparum* infections.[2,5,7,8] ■

Veterans Administration Hospital (99208)

chemical nomenclature

generic	trade
chlaroquine	Aralen
pyrimethamine	Daraprim
quinacrine	Atabrine
hydroxychlaroquine	Plaquenil
chlaraguonide	Paludrine

abstracto

El Plasmodium falcíparum causa mas del 90 por ciento de la malaria indentificada que se ve en el Sudeste de Asia y recurrencias se ven ocasionalmente en veteranos que regresan. La malaria falcíparum es diferente de la variedad clásica y puede causar descepció. La fiebre es prolongada y puede semejarse a la de tifoidea o la temperatura puede ser subnormal. Los síntomas pueden indicar ataque de órganos y sistemas cuando los parásitos obstruyen la corriente capillar y causan toxemia. Cualquier veterano que regrese del Sudeste de Asia y que este enformo debe ser sospechado de tener la nfermedad. Los parásitos pueden tener resistencia a los antimaláricos nuevos. Si así es se deberá usar quinina.

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In whose interest?

In trying to replace the price system even partially by government fiat, appeals are always made to "social responsibility." Every businessman and every labor union leader is supposed to wear two hats. In deciding what is in the best interests of his company or his group he wears one hat. When he goes into a deep study to decide, if he can, what is in the public interest, he must wear another hat. But how to determine precisely what is in "the public interest" and where "social responsibility" lies is impossible for anyone to judge. Every individual knows precisely what is *in his own interest,* and the competitive free market economy decides for him whether he can gain his objective. But how can he become a seer and a judge whether his action is in the interest of 190 million people every time he makes a decision? The attempt to force people to act "in the public interest" instead of their own is merely an attempt by bureaucrats in government to impose their own judgments on the economy.

Lawrence Fertig in The Freeman, November, 1966

Complete Lymphoma Remission During Cyclophosphamide Therapy

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Chronic cyclophosphamide administration to two patients with widespread lymphoma produced complete remissions, confirmed after 4 years by autopsy in one and after 5 years by laparotomy in the other. The drug caused no significant ill effects. Maintenance chemotherapy has therefore been found practical for long-term use, and it should be considered in each patient who responds well to initial chemotherapy with an alkylating agent.

Alkylating chemotherapy of widespread lymphoma usually produces a moderate degree of clinical improvement that lasts a few months.[1] Complete remissions under such circumstances only occasionally have been reported; these have endured, for example, for 6 to 30 months in giant follicle lymphoma and Hodgkin's disease[2] and for five years in a single patient with reticulum cell sarcoma.[3]

Two patients are presented in whom advanced lymphomas disappeared during cyclophosphamide maintenance for periods of four and five years. These favorable experiences are the more remarkable because in both cases the disease had been progressing despite radiotherapy.

CASE REPORTS:

Case 1. A 54-year-old stenographer observed enlargement of nodes in the axillae and in both sides of the neck anteriorly and posteriorly in October, 1957. Excision biopsy of three left axillary nodes in January, 1958, disclosed a maximum individual diameter of 4.5 cm, and in each of them microscopy showed "malignant lymphoma, follicular type, with areas of transition into lymphosarcoma" as depicted in Figures 1 and 2. Complete blood cell counts and sedimentation rates were normal, as were chest x-rays. X-ray therapy was administered to both axillary and both cervical areas, each receiving 1,800 r, and cobalt-60 teletherapy was given prophylactically to the anterior mediastinum, totalling 1,100 r. All nodes shrank and she seemed well until September, 1958, when left inguinal and iliac nodes were found to have enlarged to 2 cm diameter. X-ray therapy to the inguinal areas was soon followed by near disappearance of all nodes. In December, 1959, adenopathy recurred in the neck, axillae and groins, splenomegaly developed, and there was pressure discomfort with some lassitude but no fever or weight loss. In May, 1960, 45 mg of thiotepa was given intravenously over a five-day period. All tumors receded about 50 per cent within two weeks. Then cyclophosphamide, 100 mg per day, was started orally for chronic supressive purposes. A daily dose of 25 to 50 mg was continued, keeping the leukocyte count 4,000 to 5,000 per mm on six-weekly checks. By August, 1960, a complete remission was achieved, and it has been sustained through the spring of 1965.

During the summer of 1963 a mild long-term depression worsened, so electroshock therapy was given with moderate improvement. In February, 1964, chronic atrial fibrillation, presumably due to ischemic heart disease, was discovered and digitalization was carried out. The depression continued during the winter, and she stopped taking digitalis and cyclophosphamide. The ventricular rate accelerated to 200 beats per minute and the legs became ischemic, precipitating hospitalization in March, 1965. Iliac thromboendarterectomies were performed on March 28, 1965. At laparotomy the abdominal lymph nodes were found to be of small size, conforming with the clinical state of complete remission of the lymphosarcoma for a total of five years.

Case 2. A 61-year-old executive noted vague discomfort in the left hip and thigh for one year before discovering a left inguinal mass. A biopsy in April, 1960, disclosed "malignant lymphoma, Hodgkin's sarcoma type" as seen in Figure 3. X-rays showed evidence of destructive lesions in the left pelvis and hip. Cobalt-60 teletherapy in the left inguinal area produced apparent complete resolution. However, in February, 1961, a 15 cm mass was found in the midabdomen, and it vanished during cobalt therapy. In September, 1961, a mass appeared in the anterior left thigh, and a tumor began to cause proptosis of the right eye. Both responded well to cobalt therapy. Then right axillary and new abdominal subcutaneous tumors appeared. Biopsy of the latter again showed Hodgkin's sarcoma. Sternal marrow biopsy was normal as were complete blood counts and chest x-rays.

In October, 1961, cyclophosphamide was started orally and intravenously, and 3,780 mg total was given during a five-week period. By December a complete remission was achieved, and there was no

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Dr. Perkins is physician, St. Vincent Hospital.

The authors are grateful to Drs. Arthur J. Seaman and Joseph H. Nohlgren for helping with this study.

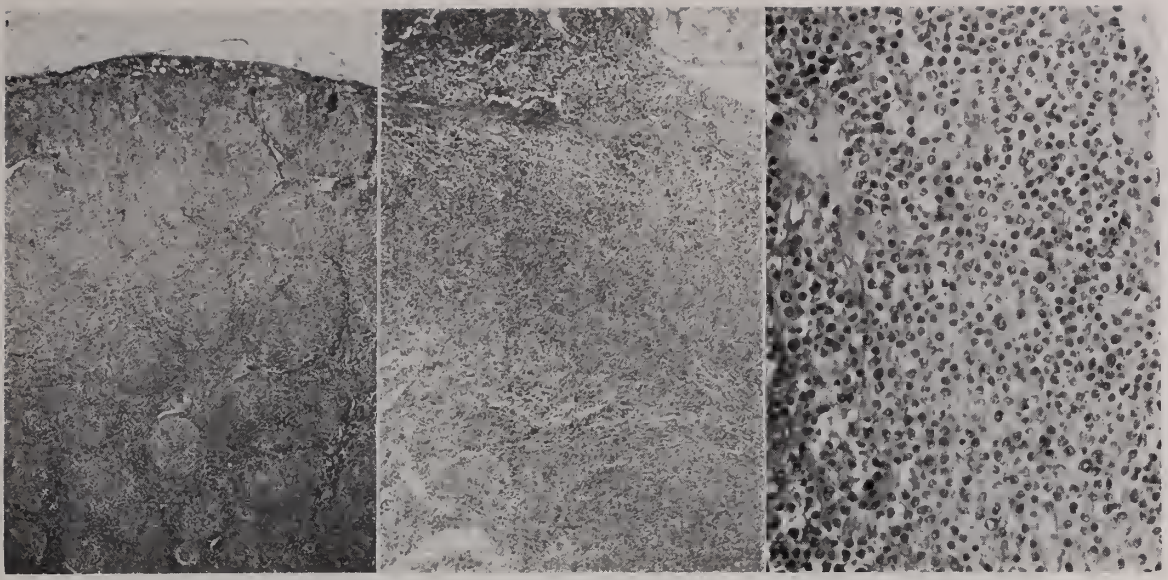

Fig. 1 Fig. 2 Fig. 3

Figure 1, case 1, photomicrograph of an axillary lymph node showing giant follicle lymphoma (x 11); Figure 2, case 1, photomicrograph of another portion of the axillary lymph node showing lymphosarcoma (x 11); Figure 3, case 2, photomicrograph of inguinal mass disclosing Hodgkin's sarcoma with one Reed-Sternberg cell (x 178).

recurrence. During the next four years of life he received the drug in daily oral doses, averaging 50 mg and the leukocytes ranged from 4,000 to 5,000 on bimonthly examination. A persistently elevated sedimentation rate and occasional slight anemia suggested the possibility of persistent malignancy. But he remained clinically well until November, 1965, when death was caused by ischemic heart disease with acute myocardial infarction. Complete autopsy revealed no evidence of neoplasm.

discussion

Complete remission of widespread lymphomas in these two patients may be credited solely to chemotherapy. Their improvement was probably not spontaneous since in both cases the tumors were progressing until halted by drug administration. Although chemotherapy in case 1 was begun with a small dose of triethylene thiophosphoramide, a related agent, the principal oncolytic effect is attributable to cyclophosphamide. In case 2, the latter was the only antitumor drug used.

The duration of the remissions in these patients is most unusual for relapse may reasonably have been expected in each one within three months or so. No adequate explanation of these very favorable courses can be offered. But the intensity of the continuing chemotherapy, causing slight chronic leukopenia, could have been of some importance in prolonging tumor suppression.

Several reports have suggested that maintenance chemotherapy has been of value in preventing recurrence of lymphomas or leukemia. A particularly important study was that by Scott, et al,[4] who found that daily chlorambucil administration prolonged nitrogen mustard-induced remissions in advanced Hodgkin's disease for periods up to 21 months. Similar benefit from cyclophosphamide has been described in patients with lymphosarcoma.[5] Multiple myeloma has occasionally responded markedly to cyclophosphamide,[6] and nearly complete disappearance of the disease has been observed after three years of chronic therapy.[7] Cyclophosphamide plus prednisone produced a complete remission in 34 of 58 children with acute leukemia.[8] Then daily oral therapy apparently prolonged the remission to a median of 123 days and to an extreme of 39 months. (Also, 6-mercaptopurine given to a second group of children was found similarly effective without causing hemorrhagic cystitis.) Maintenance chemotherapy, therefore, appears rational, assuming a satisfactory initial response and the absence of a contraindication, such as severe leukopenia or thrombocytopenia.

More information is needed to establish the role of chemoprophylaxis, for initial chemotherapy alone infrequently has been followed by long periods of lymphoma quiescence. For example, African lymphoma regressed more or less completely in 6 of 19 patients given Methotrexate and in 24 of 63 treated with cyclophosphamide by Burkitt, et al.[9] Three of the Methotrexate cases and one of those who received cyclophosphamide were believed to be symptom-free on no further therapy three to five years later. Chronic granulocytic leukemia too has been observed to remain quiescent for as long as seven years after an initial course of busulfan.[10]

We have encountered no reference to autopsy or anatomically-demonstrated freedom from lymphoma following chemotherapy. Thus the present case reports represent an extreme degree of tumor suppression, one which may be termed curative. The clinical success obtained in these patients, who had widespread lymphoma progressing despite radiotherapy, emphasizes the potential value of drug treatment and dispells pessimism that too often attends the management of the advanced lymphoma patient.

1014 Medical Dental Bldg. (97205)
(Dr. Rogers)

Chemical Nomenclature

Generic	Trade
cyclophosphamide	Cytotaxan
chlorambucil	Leukeran
busulfan	Myleran
thiotepa	Thio-Tepa
4-amino-N^{10}-methyl-pteroylglutamic acid	Methotrexate

abstracto

Administración crónica de cyclofosfamida a dos pacientes con linfoma ampliamente diseminado produjo completas remisiones, las cuales fueron confirmadas en un paciente por autopsia después de cuatro años y en el otro después de cinco años por laparotomía. La droga no causó significantes efectos. El mantenimiento quimoterapéutico desde allí ha sido encontrado práctico para el uso a largo tiempo, y esto sería considerado en cada paciente que responde bien a la quimoterapia inicial con agentes de tipo cyclofosfamida.

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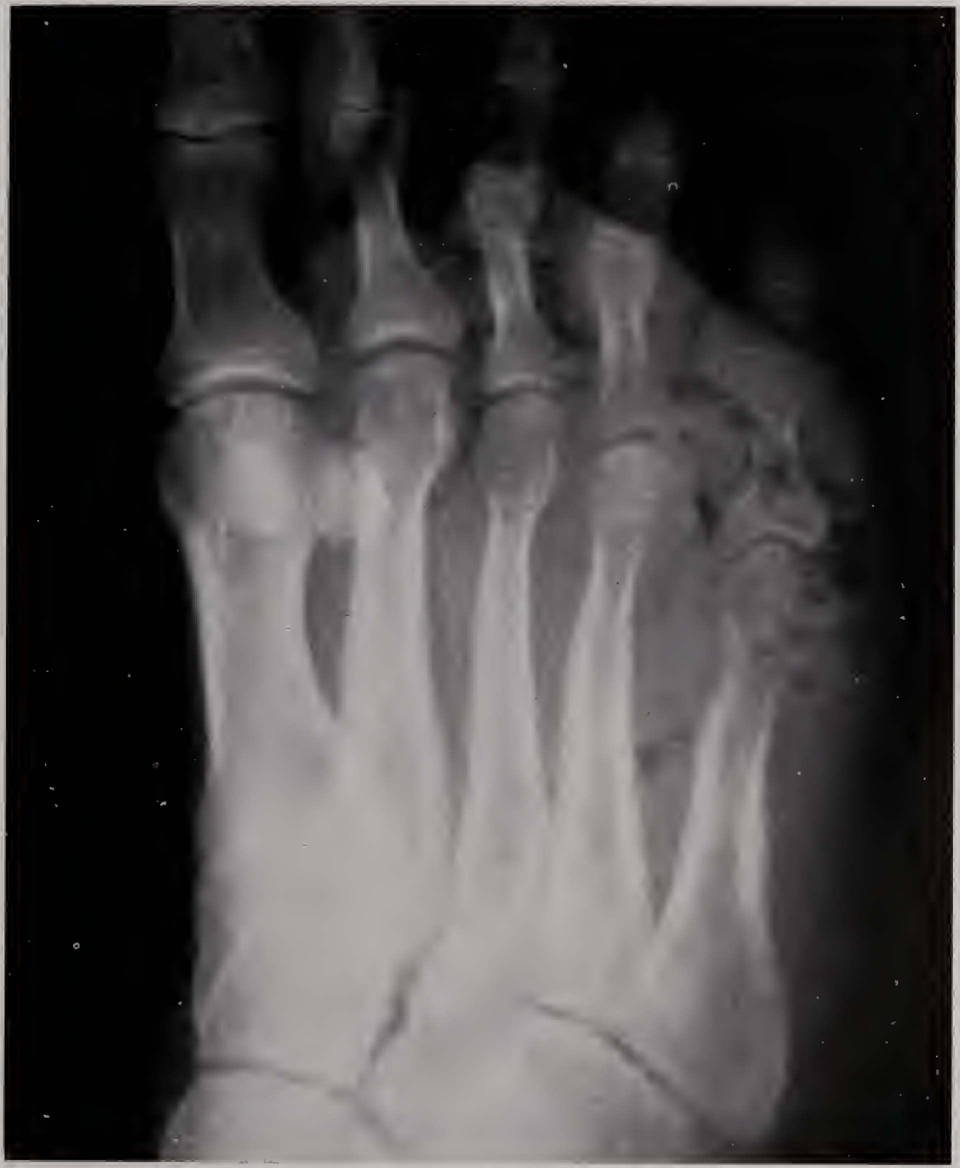
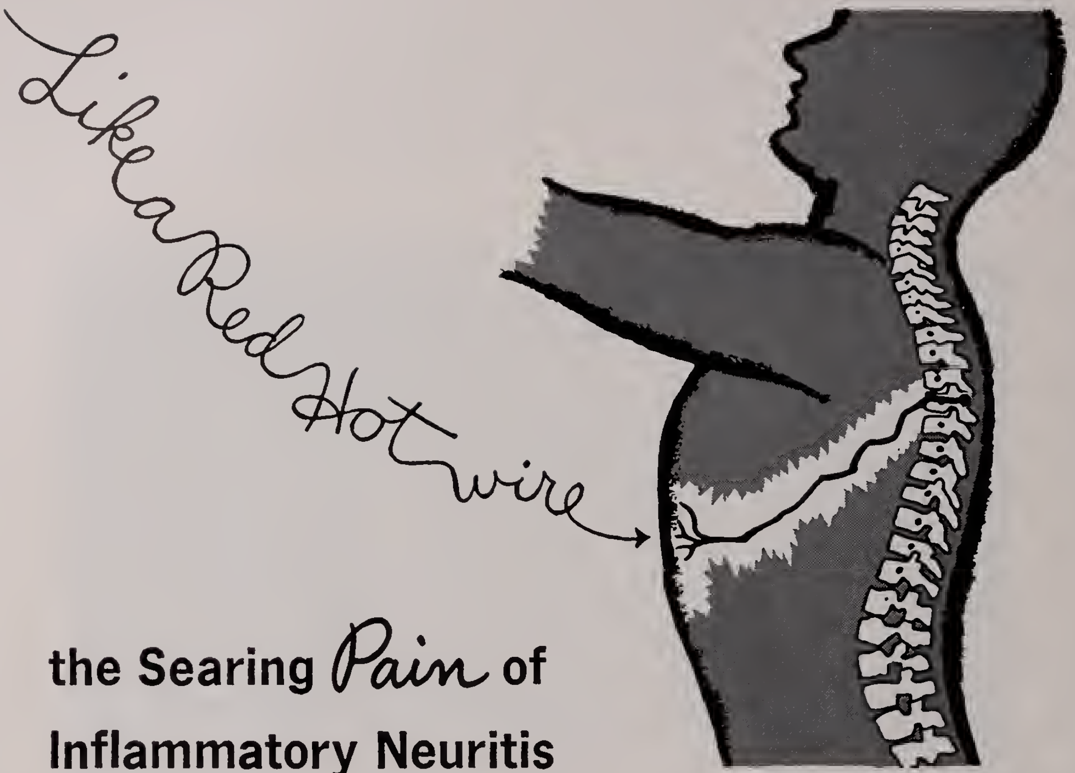
X-Ray of the Month

SUBMITTED BY WASHINGTON STATE RADIOLOGICAL SOCIETY



A 50-year-old white male with pain and swelling of his right foot. What are the diagnostic possibilities? Any speculations about systemic disease?

see page 515


Like a Red Hot wire

the Searing *Pain* of
Inflammatory Neuritis

PROTAMIDE®

colloidal solution
of denatured
proteolytic enzyme

provides the *selective* fast-acting relief . . .

Repeatedly in published clinical studies,[1-10] investigators stress the following therapeutic characteristics:

- relief of inflammatory pain (non-traumatic) is prompt—particularly when administered early.[1-4]
- disability time is shortened from weeks to days.[7]
- so specifically effective is Protamide that a positive response is diagnostic of inflammatory neuritis.[3,4]
- prompt relief is observed even in ophthalmic herpes zoster.[5,6]
- incidence of sequelae such as postherpetic neuralgia is reduced.[1-4]
- consistently described as the therapy of choice.[1,3-6]

Administration:
In neuritis and herpes zoster, one ampul I.M. daily for 2 to 5 days usually relieves pain completely in patients treated early. Well tolerated.[1-10] However, inadvertent intravenous administration may cause anaphylactoid reaction.

—Boxes of 10 ampuls, 1.3 cc. each.—

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Sherman Laboratories
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New view of an oral contraceptive at work

Although suppression of ovulation remains the primary mode of action of oral contraceptives, newer knowledge indicates that products like Norinyl-1 — which provide the combined action of both low-dosage progestogen and estrogen for the full treatment cycle — offer multiple contraceptive action that helps explain their unexcelled record of effectiveness. This report explores the secondary protective mechanisms against unwanted pregnancy offered by combined hormonal administration and the importance of the progestational agent in making such multiple contraceptive action possible.

Accumulating evidence has indicated that sparse, highly viscous cervical mucus has an adverse effect on the motility and survival of spermatozoa.

The estrogen-opposing progestational ingredient of Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.) reverses the usual midcycle picture of a thin, watery cervical mucus. The result — a built-in barrier that inhibits sperm from reaching the ovum should one be released. The inset in the adjoining photograph shows immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

See last page for contraindications, precautions, side effects and dosage.

How the estrogen-opposing action of Norinyl-1 creates a hostile cervical mucus

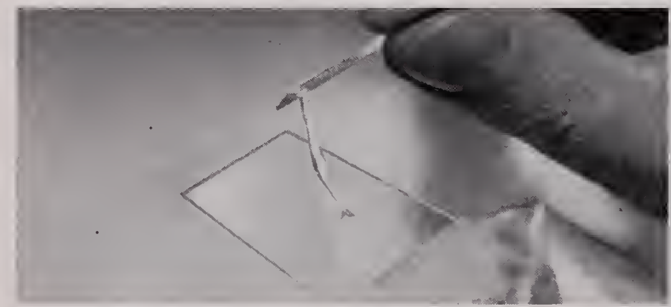
Normally estrogen activity during the fertile midcycle stimulates the production of cervical mucus. The mucus at this time is profuse and watery—allowing maximum sperm motility and promoting penetration.
But what happens when Norinyl-1 is administered? Its potent progestogen, norethindrone, opposes estrogen stimulation of cervical mucus. Consequently, the amount of mucus decreases and its viscosity increases. This results in a sparse but thick mucus barrier that diminishes the vitality of the sperm and impairs its powers of penetration.

How hostile cervical mucus supports contraceptive action

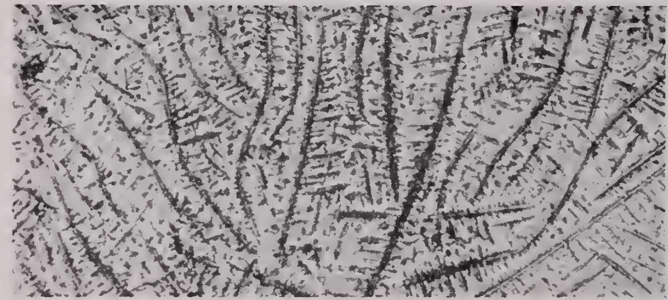
The importance of these observations to the effectiveness of Norinyl-1 has been noted in a report on 89 patients taking this medication.* In all instances, cervical mucus obtained from cycle day 5 to cycle day 29 appeared scant and thick and exhibited little or no Spinnbarkeit. In the opinion of this investigator, the effect on cervical mucus may be sufficient to prevent conception.

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

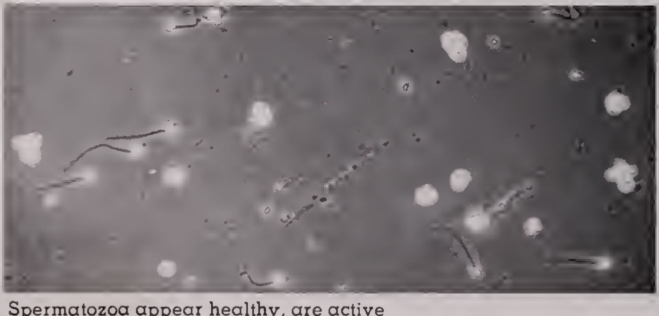
Normal cervical mucus at midcycle in untreated patient permits sperm motility... promotes sperm penetration.



Cervical mucus is thin and watery with a stretchability (Spinnbarkeit) of 15 to 20 cm.

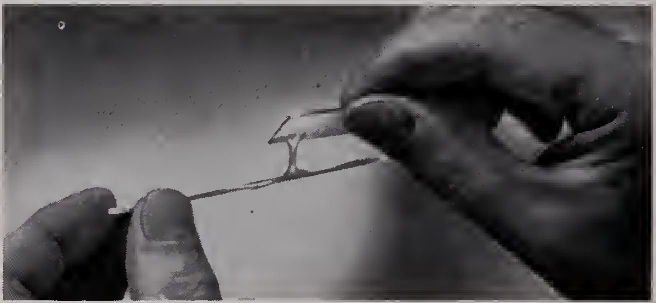


Thin, watery mucus crystallizes into this well-defined, fernlike pattern within a minute.

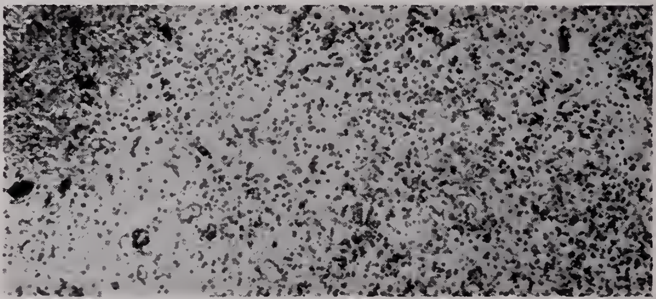


Spermatozoa appear healthy, are active and freemoving.

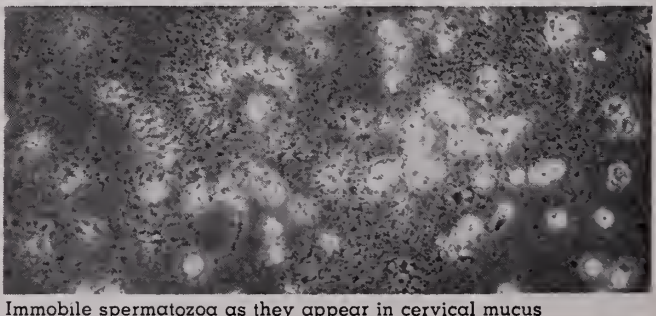
Hostile cervical mucus at midcycle produced by Norinyl-1 impairs sperm vitality... inhibits penetration.



Cervical mucus is scanty, thick and viscous. Spinnbarkeit is 1 cm. or less.



In thick, hostile cervical mucus the fern pattern is poorly defined or absent.

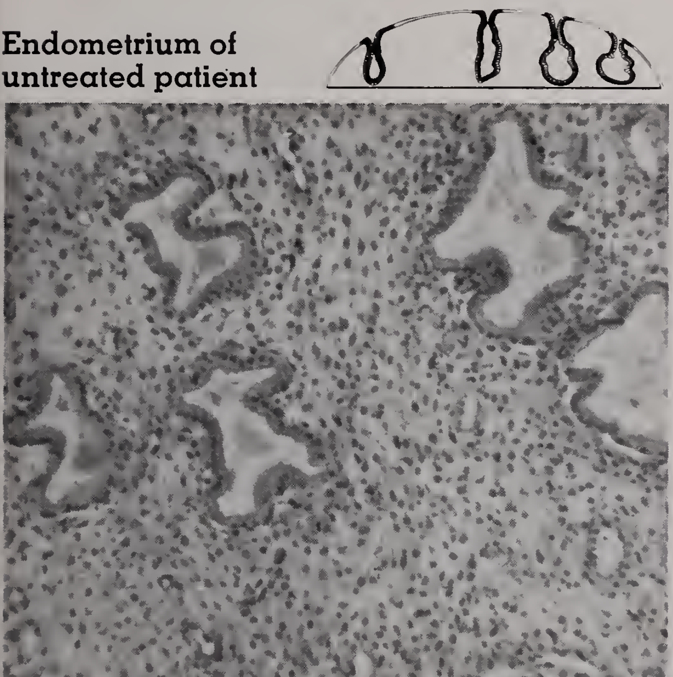


Immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

An endometrium unreceptive to nidation—another supporting contraceptive action of Norinyl-1

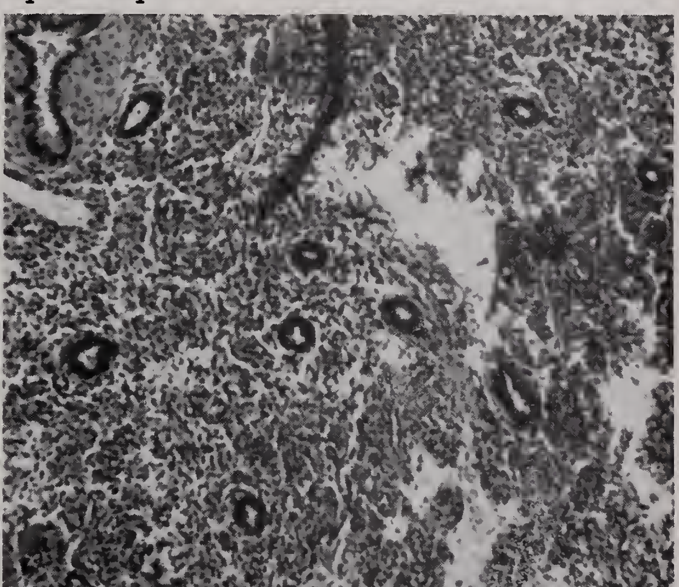
Let us suppose that an ovum is released—as occurs in an occasional, rare case—and somehow a sperm succeeds in penetrating the cervical mucus barrier? Should this come about, one additional action of Norinyl-1 may protect the patient from unwanted pregnancy—progestogen intake makes endometrial tissue unreceptive to implantation.

Endometrium of untreated patient



Normally the endometrium progresses through a proliferative phase stimulated by estrogen and a secretory phase stimulated by progesterone. During the secretory phase the endometrium is receptive to the fertilized ovum.

Unreceptive endometrium produced by Norinyl-1



When Norinyl-1 is administered its progestogen component—norethindrone—accelerates the secretory phase, suppressing glandular development. From day 11 on, secretory action is no longer present. The result is that during the latter half of the cycle the endometrium becomes unreceptive to egg implantation.

new Norinyl®-1 tablets

(norethindrone 1mg c̄ mestranol 0.05mg.)

See last page for contraindications, precautions, side effects and dosage.

for multiple contraceptive action

effective fertility control on half the previous dosage

maintains ratio of the established norethindrone/mestranol combination

lower cost

new Norinyl®-1 tablets

(norethindrone 1mg. c̄ mestranol 0.05mg.)

Reduction of oral contraceptive dosage to lowest effective levels has become a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now available in a new strength in which *both* norethindrone and mestranol are reduced 50 percent. Studies show that Norinyl-1 achieves fertility control with only 1.05 mg. of combined progestogen and estrogen per tablet.

Norethindrone was first reported for use as a progestational agent in human beings in 1955. Norethindrone 2 mg. with mestranol 0.1 mg., as an oral contraceptive, is currently in use by over 2,000,000 women. Clinical experience now establishes that Norinyl-1 also amply meets the criteria of reliability and safety.*

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

PRESCRIBING INFORMATION

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia, or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of Norinyl-1 in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with Norinyl-1. Therefore, if such tests are abnormal in a patient taking Norinyl-1, it is recommended that they be repeated after the drug has been withdrawn for 2 months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibroids may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac, or renal dysfunction, require careful observation. 5. Although a cause and effect relationship has not been established, Norinyl-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged Norinyl-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Norinyl-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. A cause and effect relationship has not been demonstrated. 11. Because of the effects of estrogens on epiphyseal closure, Norinyl-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask the onset of the climacteric. 13. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following adverse reactions have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma, breast changes (tenderness, enlargement and secretion), loss of scalp hair, change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, erythema multiforme, erythema nodosum, hemorrhagic eruption, migraine, rash (allergic), itching, rise in blood pressure in susceptible individuals, mental depression.

The following occurrences have been observed in users of oral contraceptives. A cause and effect relationship has not been established: thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased bromsulphalein retention and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metapyrone test, pregnanediol determination.

Other side effects reported to have occurred in association with use of this drug are dizziness, hirsutism, pains in legs, back, chest and abdomen, dysuria, drowsiness, vaginal discharge, libido increased and decreased, eruptions, hypermenorrhea, hypomenorrhea, increased appetite, G.U. infections, varicose veins, abdominal fullness, acne, headache, nervousness, allergies, blurred vision, pain in eyes, and itching in eyes. *For complete clinical data, see package insert.*

Dosage and Administration: 1. One tablet of Norinyl-1 is administered orally for 20 days beginning on day 5 of the menstrual cycle. (Count day 1 of the cycle as the first day of menstrual bleeding.) Repeat this dosage schedule for each cycle. 2. If no menstrual period occurs after a cycle of treatment (20 tablets) in which patient adhered to the schedule, the patient must be instructed to resume taking the Norinyl-1 tablets 7 days after the previous 20-day course was completed. For example, if the last pill of a previous cycle had been taken on a Sunday, then a new cycle of treatment should begin on the following Sunday. 3. In the postpartum woman, it is recommended that the first cycle of treatment should begin on day 5 of the first menstrual cycle. However, Norinyl-1 should not be administered during lactation.

Availability: Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.)—Dispensers of 20 and 60 and bottles of 250 tablets.

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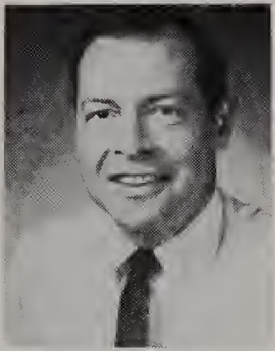
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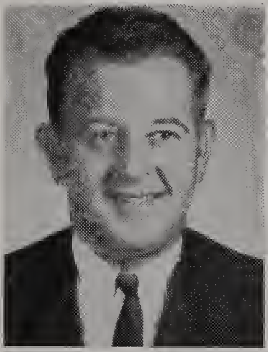
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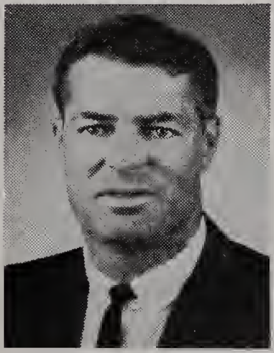
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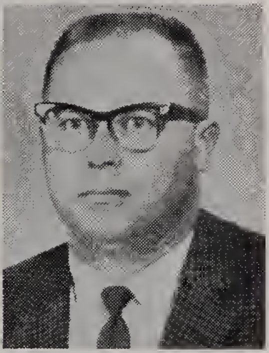
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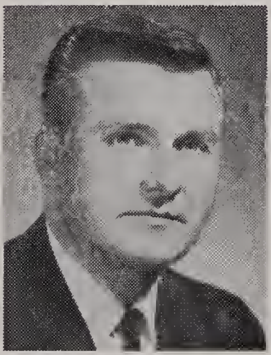
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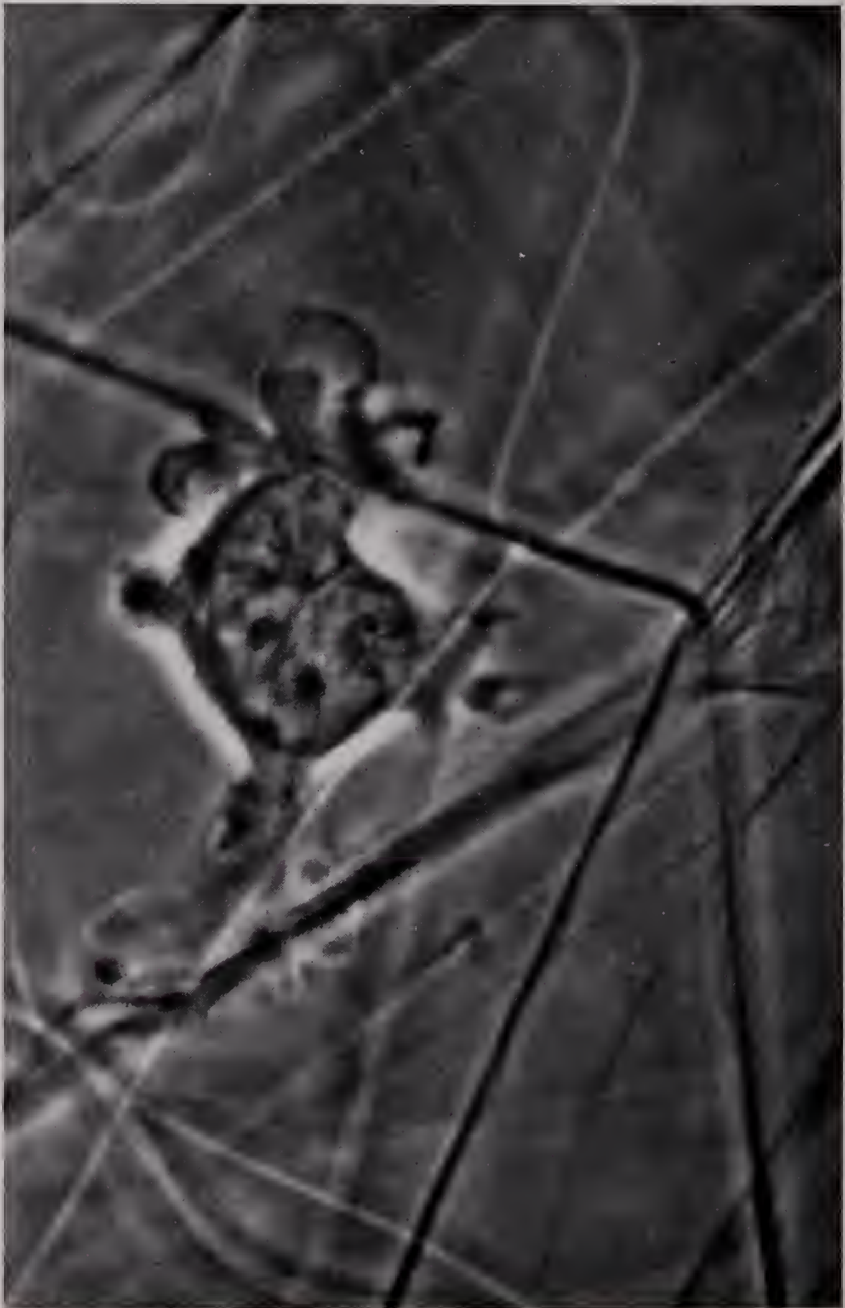
INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

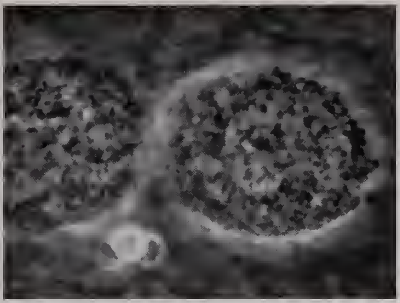


Visual evidence of how corticosteroids influence the inflammatory reaction

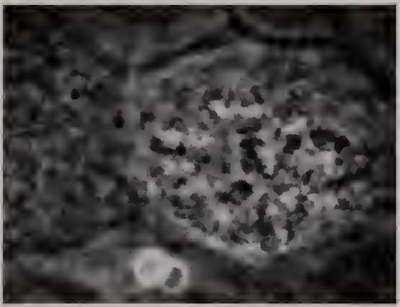
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



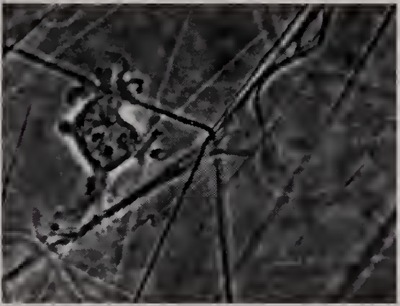
Phase-contrast microscopy showing mast cell before injury.



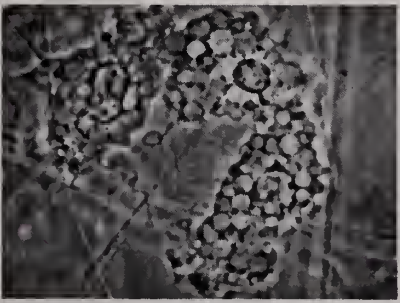
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

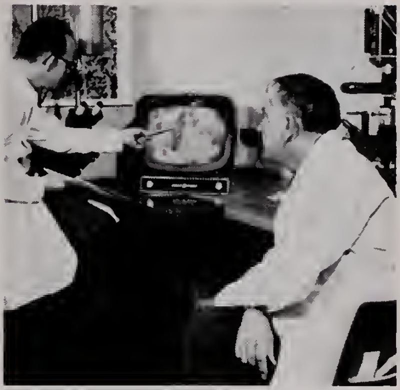
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid — Synalar (fluocinolone acetonide) — the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



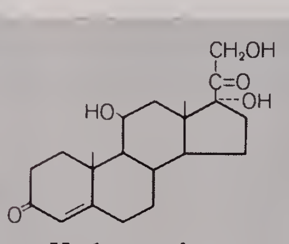
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses,* a film based on this study, is now available from your Syntex representative.

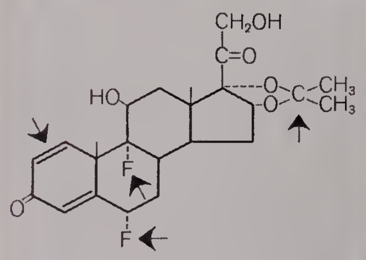
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

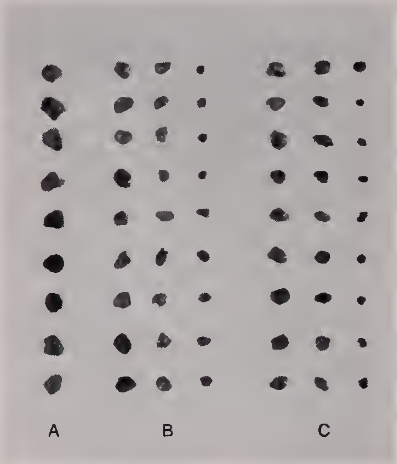


Fluocinolone Acetonide (Synalar)

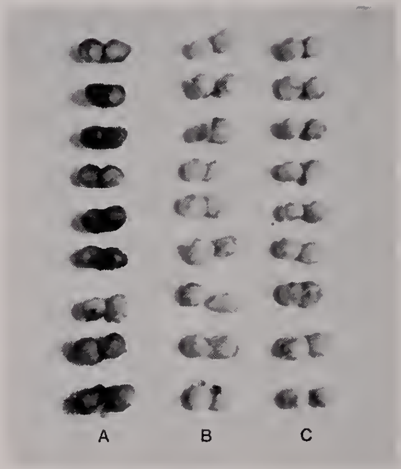
- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



The Thymus Involution Assay[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B—injected with 1, 2 and 4 mg. of hydrocortisone—show progressively smaller thymuses as does Group C—injected with fluocinolone acetonide—but with only 1/500th the dose of hydrocortisone.



The Antigranuloma Assay[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

Prescribing Information
For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes. Contraindications: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. Precautions: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. Side Effects: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

References: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

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OREGON

Oregon Medical Association—**2164 S. W. PARK PLACE, Portland, Oregon 97205**

PRESIDENT *John E. Tysell, M.D., Eugene*
SECY.-TREAS. *Alfred C. Hutchinson, M.D., Portland*
EXECUTIVE SECRETARY *Mr. Roscoe Miller, Portland*
Annual Meeting Sept. 19-23

Portland Physician On Advisory Council

John M. Brookhard, professor and chairman of the Department of Physiology of the University of Oregon Medical School, Portland, has been appointed to the National Advisory Council on Health Research Facilities for a four-year term beginning July, 1967.

The 12-member Council was established by Congress to advise the Surgeon General on broad program policies and on grant applications relating to the construction and equipping of health research facilities.

A native of Cleveland, Ohio, Dr. Brookhard received his B.S., M.S., and Ph.D. in physiology from the University of Michigan, Ann Arbor. He was on the faculty at Northwestern University Medical School and Loyola University, Chicago, before joining the University of Oregon Medical School in 1949.

Graduate Training In Anesthesiology

The Division of Anesthesiology at the University of Oregon Medical School is offering a 6-month training program for physicians who are called upon to administer anesthesia in the smaller community hospitals in the Northwest. The course is designed to give the physician clinical experience in the newer methods of anesthesia and to provide them with a firm foundation of the physiology and pharmacology involved.

The course will be available to a limited number of physicians after July 1, 1967. For further information contact: Frederick P. Haugen, M.D., Professor and Head, Division of Anesthesiology, University of Oregon Medical School, Portland, Oregon, 97201.

Osterud Heads UOMS Public Health Department

HAROLD T. OSTERUD, M.D.

Harold T. Osterud has been named Acting Head of the Department of Public Health at the University of Oregon Medical School, by Dean Baird. The appointment is subject to approval of the Oregon State Board of Higher Education.

Dr. Osterud completed his medical education at the Medical College of Virginia, Richmond, Virginia, in 1947 and received a master's degree in public health at the University of North Carolina School of Medicine, Chapel Hill, North Carolina.

After military service of two years, in Japan and Korea, Dr. Osterud began his public health career in Coos County. He subsequently became health officer for Lane County and, from Eugene, moved to Portland in 1961 to join the faculty of UOMS.

He is an indefatigable researcher and reports his studies regularly to professional specialty groups. His contributions from public health research to clinical medicine have been made by skillful condensation of collected data. His interest in education was recognized by the American Public Health Association when he was appointed chairman of that organization's continuing education committee.

Dr. Osterud assumes the duties relinquished by Adolph Weinzirl, formerly Chairman of the Department, who now plans to do more teaching.

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PRESIDENT'S page

Tribute to Woman's Auxiliary

JOHN E. TYSELL, M.D.

The doctors of Oregon are proud to pay tribute to the Woman's Auxiliary of the Oregon Medical Association. Founded in 1927, the Auxiliary has grown to over 2,000 members. During the early years there was considerable anxiety on the part of some doctors that involving women in doctors' business was quite dangerous and improper.

However, through the years, as might have been predicted, they have become a powerful force for good as well as indispensable partners in maintaining and improving a good medical image.

Representative of some of the Auxiliary's outstanding activities are the development of playgrounds for retarded children's schools, the "Doctor's Wife" rose bush and the drug collections. Permit me to elaborate.

The Auxiliary recently developed and built a playground at the school for mentally retarded children near Aloha, Oregon. Due to the remarkable success of this project, the Auxiliary is currently laying plans for a second playground at the Shangri-La School, Salem. A corporation has been formed (Med-Aux Park, Inc.), which will work to establish Med-Aux Parks where they are most needed throughout the State.

A new, salmon pink, hybrid tea rose is now being promoted by the Auxiliary. The rose, officially named the "Doctor's Wife," was hybridized by Mr. Von Abrams and developed by horticulturalist Mr. Fred Edmunds of Wilsonville. The "Doctor's Wife" rose has already gained national recognition and will be serving as the "Cover Girl" on national magazines as well as this issue of NORTHWEST MEDICINE.

The rose can be obtained with a $5 contribution, and funds from its distribution will be used to finance other Med-Aux Park playgrounds.

The Auxiliary should also be commended for a third project. Through its drug pick-up program more than 16½ tons of drugs, vitamins and medical supplies have been collected by the County Auxiliaries. Last year the girls won a blue ribbon for their International Health project; yet this year they have already doubled last year's total, with the May shipment yet to be added. These vital drugs and supplies are shipped abroad and will help to meet requests for medical supplies from needy missions and hospitals overseas.

So we salute the lovely ladies who are our wives and who are earning a significant position in the medical community. ■

John E. Tysell M.D.

MRS. WILLIAM LEHMAN
President-Elect

MRS. J. D. MOLENKAMP
Treasurer

MRS. WILLIAM ZARTMAN
President

Alumni Luncheon at the Hilton Hotel, April 7. The luncheon replaced the customary banquet and concluded the Alumni Meeting. Howard P. Lewis was the luncheon speaker.

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Postgraduate Courses for May and June

Two postgraduate courses have been planned for May and June at the University of Oregon Medical School.

A postgraduate conference, Sepis in Obstetrics and Gynecology, will be offered May 20. The course will reappraise the major septic disorders in obstetrics and gynecology with special reference to cause, avoidance and contemporary treatment. The identification of bacterial pathogens and selection of newer, effective antibiotics will be stressed.

Faculty will be R. Gordon Douglas, Emeritus Professor of Obstetrics and Gynecology, Cornell University Medical School, and Project Director, Maternal and Infant Care Projects, City of New York Department of Health; William McCabe, Associate Professor of Medicine, Boston University Medical School; Jason H. Collins, Associate Professor, Department of Obstetrics and Gynecology, Tulane University Medical School; John C. Sherris, Professor of Microbiology and Director of Clinical Laboratories, University of Washington School of Medicine; William M. M. Kirby, Professor of Medicine and Consultant on Infectious Disease Service, University of Washington School of Medicine; and Ralph Benson, Professor and Chairman, Department of Obstetrics and Gynecology, University of Oregon Medical School.

A course in Human Genetics is scheduled for June 15 and 16. It is designed to present a comprehensive view of the use of genetics in medical practice. Family presentations will be used to illustrate basic genetic mechanisms. They will then be discussed in depth by course participants and faculty.

Guest faculty will include David Y. Hsia, Professor of Pediatrics, Northwestern University Medical School, Director Genetics Clinic, Children's Memorial Hospital, Chicago; Robert Krooth, Professor of Human Genetics, University of Michigan; Guido Pontecorvo, Ph.D., Director of the Institute of Genetics, The University of Glasgow, Scotland.

Faculty from the University of Oregon Medical School will be Neil Busit, Assistant Professor Pediatrics; Robert A. Campbell, Assistant Professor Pediatrics; Frederick Hecht, Assistant Professor of Pediatrics and Human Genetics; Richard T. Jones, M.D., Ph.D., Professor and Head of the Department of Biochemistry; Robert D. Koler, Professor of Medicine, Head, Division of Human Genetics; and Everett Lovrein, Assistant Professor of Pediatrics and Human Genetics.

Tuition fee for the course in obstetrics and gynecology is $10; it is acceptable for 6 hours of AAGP Category 1 credit.

Tuition fee for the genetics course is $45, this includes a copy of the soft-back textbook, Human Genetics, by V. A. McKusick. The course is acceptable for 14 hours of AAGP Category 1 Credit.

Sommer Memorial Lecturers

Sommer Memorial Lecturers, Robert A. Chase, Charles Rob, Maxwell Finland, during coffee break at the meeting at University of Oregon Medical School, April 5-7. Dr. Chase has agreed to submit manuscripts on some of the material delivered at the meeting. His papers will be published.

DR. GEORGE C. KNOTT, *Independence, Oregon, died Feb. 27. He was 86. Born in Anna, Ill., he was graduated from the State University of Iowa College of Medicine, Iowa City, in 1909. He practiced in Independence for almost 40 years, retiring in 1960.*

He established a small hospital in North Independence but later because of proximity to Salem he closed it. Later he and two other doctors established the Independence Clinic, which still exists. Cause of death was arteriosclerotic heart disease.

DR. PAUL F. LACY, *70, Portland, died Feb. 18. He had practiced medicine in Portland for the past 40 years. He was graduated in 1919 from Kansas City University of Physicians and Surgeons. He served in World War I. Dr. Lacy did postgraduate work in surgery in Vienna from 1927 to 1929. Cause of death was acute myocardial infarction due to myocardial infarction and arteriosclerotic heart disease and pulmonary fibrosis.*

DR. CLYDE RAYMOND WALKER, *Portland, died Feb. 11. He was 80. Dr. Walker received his M.D. degree from the University of Louisville School of Medicine in 1907. Cause of death was arteriosclerotic heart disease with congestive failure, and cerebral thrombosis.*

BOOKS

RECEIVED: The following books have been received. Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

The medical lexicographer. By J. E. Schmidt, M.D., Charlestown, Indiana. 105 pp. Price $4.75. Charles C Thomas, Springfield, Illinois. 1966.

Interdisciplinary perspectives of time. By R. Fischer, et al. Edward M. Weyer, Editor in Chief. 367-915 pp. Illustrated. Price $12.00. New York Academy of Sciences, 1967.

Sensory evoked response in man. By Robert Katzman, et al. Editor Harold E. Whipple. 346 pp. Illustrated. Price $7.00. New York Academy of Sciences, 1964.

Results of surgery for peptic ulcer. A cooperative study by twelve Veterans Administration Hospitals. Edited by R. W. Postlethwait, M.D. Associate Editor: James C. Thoroughman, M.D., with Collaborators. 308 pp. Illustrated. Price $8.00. W. B. Saunders Company, Philadelphia, 1963.

Acne and related disorders of complexion and scalp. By Arthur Bobroff, M.D., Dermatologist, Health Service, Hall Health Center, University of Washington; Clinical Instructor in Medicine, University of Washington School of Medicine, Seattle, Washington. 120 pp. Price $5.75. Charles C Thomas, Springfield, Illinois, 1966.

LIFESAVING BRACELETS

More than 170,000 Americans have their lives protected by this bracelet. The nonprofit Medic Alert Foundation of Turlock, California provides the signaling device for the one person in five who has a special or "hidden" medical problem. The American Medical Association estimates that forty million Americans should be wearing some sort of medical warning device. One side of the emblem has the words "Medic Alert" and the staff of Aesculapius to warn emergency personnel that a special medical problem exists. On the back is engraved the member's medical problem, such as "Diabetes," "Allergic to penicillin," et cetera. A 24-hour a day collect telephone number and an individual serial number also engraved on each emblem provides an additional link with life for the member. A one-time basic fee of $5.00 is charged.

Applications forms or additional information may be secured by writing to:

MEDIC ALERT
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WASHINGTON

Washington State Medical Association—1800 Terry Avenue, Seattle, Washington 98101

PRESIDENT *Lucius D. Hill, M.D., Seattle*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual meeting, September 10-13, 1967, Seattle

Pack Forest Conference V

The Pack Forest Conference, as an institution, has settled into a comfortable groove as far as arrangements are concerned, but there is nothing settled about the programs presented. And, although they usually do not settle any questions, they generally end up by settling any doubts about the unchangeableness of the continuing need to meet change. The fifth Pack Forest Conference was a twenty-four hour concentration on consideration of current changes, from noon, April 1, to noon, April 2. Of the five such conferences held by the University of Washington School of Medicine, this was, by any measure, the most thought provoking. Confronted with a kaleidoscope of evoked ideas, one group discussion leader found it impossible to summarize his session. He resorted to abecedarian listing in a facetious but revealing reflection of what actually happened. Almost literally, the consideration ranged from A to Z.

health manpower

It is difficult for a physician in practice, in a sense the retailer in medicine, to realize the swiftness with which change in conditions has created urgent need for more trained people in the health field. Lester Breslow, of Berkeley, discussed the problem as it can be appreciated from what might be called the wholesaler's viewpoint. He is California's Director of Health. His informal, easy-going discussion was packed with astute observations.

Health manpower has suddenly become an important issue. Changing demands, new knowledge and new techniques have made re-training necessary for physicians as well as for most of the auxiliary personnel. There is better understanding of health services by the public, consequently, greater demand. And the demand has been backed by willingness to spend as much as seven per cent of income to obtain the protection desired. With more money available, there has been an expansion of facilities with increased requirement for skilled individuals in all categories.

Physician-population ratio in New England and the Central Atlantic area is 180/100,000 but in Alaska it is only 80/100,000 and most of the southern states are also deficient. Using New England as a standard, total health manpower needs would be for 3,000,000 in all categories. Actual number now employed in the health field is closer to 2,500,000 but by 1975 there will be need for 3,500,000. Quality is important but has not been taken into consideration. This includes quality of the individuals recruited, quality of their experience, quality of resources available, quality of incentives and, finally, quality of the work performed.

Professionalism and its reluctance to accept change must be taken into account. There are, however, some interesting possibilities. Industrial leaders have suggested that the health field lacks what they call vertical mobility. A lowly helper in industry can rise to become president of a corporation but a hospital orderly cannot rise to become chief of staff.

> This startling observation was inserted as a thought stimulator and, at first, seems ridiculous. Actually it has been done but only by the orderly entering medical school, not by rising through ranks. Nevertheless, Dr. Breslow's thought might well be applied to thawing out the freeze that sometimes exists within the medical profession itself. See editorial-book review, "Ferment in Medicine" in the July, 1966, issue. Ed.

To satisfy current and impending needs it will be necessary to provide opportunities for advancement in the health field, to realign resposibilities, to

The conference was informal and relaxed, permitting concentrated attention. Here Dr. Breslow addresses the first session.

recruit more people and to create new kinds of health workers. It has become necessary to provide services that will keep people out of hospitals. New ways of providing health services may require introduction of management techniques, a field quite foreign to the present interests of most physicians.

Planning has become essential if health manpower needs are to be met. An approach to the problem has been made in California by establishing, in the fall of 1966, a Health Manpower Conference and Council. Its purposes are to determine present and future needs, determine methods for meeting them, establish a forum, formulate policies, seek adoption of policies, and consider health manpower in terms of types. It is anticipated that this kind of planning will be coordinated with planning for facilities and other health program planning.

In discussing Dr. Breslow's remarks, James Haviland observed that his suggestions were too practical for social workers but urgency should not obscure the fact that present quality is high. Sanford Lehman reported need for more people in the field of rehabilitation, with 17,000,000 persons limited in activity and 5,000,000 limited in mobility, 88 per cent due to chronic disease. Robert Aldrich suggested increased liason with the social sciences, anthropology, psychology, business administration, law, and city planning. One of the difficulties may lie in the fact that word meanings employed by social workers and economists differ from those recognized by physicians. Difficulties in understanding were emphasized by Lowell White, Jr., who reported a nursing-pharmacy-medicine conference, at Michigan, in which participants could not drop their professional armor for the first half day. After barriers were broken down, it became apparent that individuals in one profession were not really aware of functions of those in the others. It is, therefore, necessary to define what each does, locate overlaps, and coordinate. Do we need more physicians, or more people to help physicians?

data bank

The Foundation established by Washington State Medical Association has taken as its first activity the creation of a data bank. Mr. Gorman, WSMA Executive Secretary, clarified the purposes. The plan is to gather all information available on all health personnel as classified in the Dictionary of Occupational Titles of the U. S. Employment Service. The accumulated data will be put on tape with provision for future listing of immigrating persons, and there will be coordination with similar data gathering organizations in other states. When needs arise for individuals with special skills, their availability and competence will be obtainable on short notice. It will also be possible, when new kinds of skills are needed, to have lists of those whose backgrounds may fit them for training in the new fields.

nursing

Mrs. Jeanne Irving of Everett Junior College, reported on training of nurses. The American Nurses Association recognizes two classifications of those holding R.N. degrees. Those graduating from community college courses and hospital training schools are designated technical nurses, and those graduating from schools offering baccalaureate degrees are professional nurses. There are 20,000 technical and professional nurses in Washington but only 10,000 are employed. If there are to be 400 nurses per 100,000 population we will need 13,000 by 1970

Donald H. Williams, Director of Continuing Medical Education, Faculty of Medicine, University of British Columbia, discussed the essential elements of continuing education at the Sunday morning session.

and 25,000 by the year 2,000. Now, 509 nurses are graduating annually from six junior college programs, seven hospital schools and five baccalaureate programs. All existing schools are in need of faculty, financing and facilities. The public should be protected by stopping influx of poorly or partially trained personnel.

Charles Muller related experience with the junior college at Bremerton where members of the Kitsap County Medical Society are advising the school administration. Training of allied groups has been encouraged, since community colleges are prepared to train those who can be qualified in a two-year program. A change has been observed in the practical nurse training program. Formerly, those entering training courses were middle-aged or retired women, whereas the current trend is for young people to qualify.

socialization in Canada

Donald H. Williams, Director of Continuing Education, Faculty of Medicine, at the University of British Columbia, reported that as of July 1, 1968, socialized medical care will be provided throughout Canada. Projection indicates that within 20 years there will be a deficit of 21,000 physicians. Therefore, Canadian educators are focusing on methods by which doctors may be used more efficiently. There is some feeling in Canada that the educational institutions are producing too many specialists and not enough generalists. In commenting on this remark, Dr. Breslow said that excessively narrowed specialists have become mere technicians.

regional medical program

The evening program was devoted to the Regional Medical Program, as created by Public Law 89-239, and comprehensive planning under Public Law 89-749.

Donal Sparkman emphasized the fact that the Regional Program has been designed to investigate better methods of delivering medical care to victims of heart disease, cancer, and stroke; not to create centers for diagnosis and treatment. Planning has involved local initiative and activity, continuing medical education, regional cooperation, health manpower studies, characteristics of the problem, data on facilities, delivery of health care, improved communication and cooperative arrangements. (See current report, page 491.) Part of the function of planning will be to develop operational projects. Information to be provided to physicians will include reports on activities and actions.

Comprehensive planning under PL 89-749 was outlined briefly by Bernard Bucove. Far reaching effects of this law have not been well recognized. It will involve consideration of all aspects of health facilities, area developments, health manpower problems, personal health services and environmental health projects. Local, state and federal partnership is provided for. The law came about because state health officers had raised objections to categorical grants, recognizing the tendency of such grants to cause fragmentation of planning. Comprehensive planning was the result.

Group discussions occupied the remainder of the evening and each discussion leader reported at the Sunday morning session. It was obvious that all discussions were exploratory and that they ranged widely. There were no recommendations.

The International Team—John N. Lein, University of Washington School of Medicine; Donald H. Williams, Faculty of Medicine, University of British Columbia; M. Roberts Grover, Jr., University of Oregon Medical School. Quality of medicine in the Pacific Northwest owes much, and will owe more, to the work of these three Directors of Continuing Medical Education.

continuing education in British Columbia

From the report presented by Dr. Williams, it is clear that physicians in British Columbia have devoted a great deal of attention to improving the quality of medical care, particularly by emphasis on the need for continuing medical education. A start was made in 1960, with a grant from the W. K. Kellogg Foundation. A five-year plan was envisioned, with real concern about the possibility of changing behavior of participants in the plan

continued on page 490

PRESIDENT'S page

Better Understanding And Real Progress

LUCIUS D. HILL, III, M.D.

The fifth annual Pack Forest Conference was again highly successful. This Conference is evidence of the cooperative spirit that has existed in this state between the University, the private sector of medicine, government agencies and all groups interested in health care. From these conferences have come many new ideas which have led to better health planning. A year ago at the White House Conference, it was said by the bureaucrats that none of health planning should be left to doctors, as this is beyond their scope. Yet, here in the state of Washington, we have been told by congressional leaders and by those overseeing the Regional Medical Programs, that this state is ahead of most of the nation in regard to long range health planning.

Out of this cooperative spirit has come an avoidance of the conflicts that have beset other states. Elsewhere the town-gown struggles, government agency-private physician struggles, and in some areas the segregation issue, have held back programs that have flourished in this state.

Our guest speakers at the Conference from other areas, including California, Oregon, British Columbia and Washington, D.C., were surprised at the dialogue that is going on in this state between the health department, the private sector, the University and specialty groups. They stated repeatedly that this dialogue has been difficult to accomplish in many other states.

Themes of the Conference were "Manpower" and "Continuing Medical Education." Lester Breslow from California discussed the manner in which the manpower problem is being handled in that state. California had a health manpower conference and council which is dealing in a systematic fashion with the future manpower needs. The need for such a council in this state was considered in detail and it was the consensus that the WSMA, the University and the health department should discuss the feasibility of establishing such a council and conference in Washington. The health-manpower data bank, which our Foundation has been interested in, will be developed in coordination with the health department. Discussions were held concerning the Regional Medical Program and Comprehensive Health Planning. It was agreed that the advisory council developed under 89-749, or Comprehensive Health Planning, should be developed in close coordination with the Regional Medical Programs, otherwise, there will be overlapping and needless expenditure of health dollars.

Donald H. Williams, Professor and Chairman of the Department of Continuing Medical Education at the University of British Columbia, gave an erudite discussion outlining the basis for continuing medical education. This includes the scholarly habit of day-to-day organized reading in the home library sanctuary as well as day-to-day informal association with colleagues and patient care in consultation. Sabbatical leaves and medical society meetings along with short courses are also part of continuing medical education. Dr. Williams is concerned that postgraduate medical education does not always accomplish its objective—that of actually changing the behavorial pattern of the physician in his practice and upgrading the care of the patient. If it is not achieving this end, then it is a failure. It was pointed out at the Conference that we are becoming operational in the field of continuing medical education. The Washington Foundation for Medical Education and Research in cooperation with the Regional Medical Programs and the University has already sent out 50 pre-test questionnaires to physicians across the state. The data from the pre-test questionnaire, which deals with physicians' opinions concerning the value of existing medical education programs and the need for further programs, will be collected and analyzed and a revised questionnaire will then be sent out to the entire membership. The data obtained from this survey will serve to structure better continuing medical education courses.

It was agreed by all present that the Pack Forest Conference has contributed immeasurably to better understanding and real progress in solving the problems facing medicine in this state. ■

Lucius Hill M.D.

Coffee break — with excellent cooperation from the weather man.

continued from page 488

and about the possibility of the changed behavior making better care available.

At the present time, British Columbia is well along in planning a second five-year program. Currently, attention is being given to the fact that continuing medical education has become continuing education in the health sciences, including other health professions and technician groups.

Pertinent to the need for continuing education is recognition of the doctor-patient relationship as a fiduciary relationship. This trust is the distinctive characteristic of a profession and it involves matters of conscience as well as of scholarly trust. Recognition of trust must motivate the physician for lifelong scholarship but this is not new. It has always been the hallmark of the finest professional attitude.

New forces, creating greater demands on physicians to continue their scholarly trust, are the vast productivity of science and the public interest in competence of physicians. The physician now works in the white light of public recognition and can no longer remain hidden in an obscure office.

Continuing medical education is not the attendance at an occasional post-graduate course. Continuing medical education demands:

1. The scholarly habit of day-to-day, thoughtfully planned study, in a home sanctuary-library, with a modest number of carefully selected books and journals. The suggestion is for one hour daily for study. This is equivalent to 45, eight-hour-days per year, and it can engender a tremendous increase in productivity.

2. Day-to-day association with colleagues in patient care. This can involve bedside consultation or just conversation over coffee. Staff meetings, journal clubs, and hospital rounds serve the same purpose.

The community hospital will become the major center for continuing education but the trend toward group practice will provide increased opportunity for formal and informal consultation and exchange of ideas. Group practice will also permit physicians to get away for short courses and for sabbatical leave.

3. A sabbatical retreat of three months, every three to five years, for intensive study at a teaching hospital. Young men are now being advised to insist on sabbatical leave agreement when negotiating with groups for practice. Benefits accrue to the group as well as to the individual.

4. Regular attendance at learned society meetings. Value is enhanced if there is pre- and post-meeting study of the subjects presented. Value would also be increased if all papers to be presented should be sent out 6 weeks before the meeting, with a short list of references attached. The result would be a meeting provocative of discussion rather than one directed from the podium. The discussion could not help but stimulate interest in post-meeting study in the home sanctuary-library.

5. Attendance at short courses, always with relevant pre- and post-meeting study in the home sanctuary-library. Objectives of the short courses should always be clearly defined. They must be planned to induce change in behavior and the material presented must be relevant to the daily needs of the physicians attending. The course should arouse enough interest to send the doctor back to his books. If it does not, it is a failure.

A sense of scholarly trust always has been, is now, and always will be the most important force for a scholarly life.

rural challenge

William Henry, of Twisp, asked if those interested in continuing medical education were aware of the scope of medical practice into which the physician is forced when practicing in a rural area. The challenge he meets differs markedly from that of the urban physician. He must give *total* medical care to a population. He is expected to advise on many community problems as well as care for individuals. School problems, such as dyslexia, are brought to him for solutions. He must interpret reports of consultants because specialists do not always communicate well at a level comprehensible to the citizen. He is required to have knowledge in almost every field. As an example, he must know a good bit about opthalmology, not because he practices opthalmology but because he is usually the only one to check progress. Dr. Henry's telephone bill is usually more than $100 a month because he is more than a hundred miles from the nearest consultant and he calls for advice without regard for the cost. A short course at the University is helpful. With education it gives him some respite from the demands of practice but he cannot avoid worrying about patients as he must leave without coverage. One of his greatest needs is for library service.

hospital staff responsibility

The hospital is no longer recognized as a place for poor people to die. Public awareness of its potential has made the hospital the community health center. People frequently go to the hospital before they go to the doctor.

In discussing this situation, Carl Schlicke emphasized the need for increased participation of the physician in hospital activities. The hospital physician must be part of the hospital team and there should be staff representation, with voting privilege, on the governing body. The staff makes recommendation on granting of staff privileges and warns on unethical practice. Discharge of hospital responsibilities is possible only when there is strong staff organization.

regional medical library service

Mr. Gerald J. Oppenheimer, Head of the Health Sciences Library, expects to increase the services of the Library to physicians in the region. In the past, regional medical library service has been largely a moral responsibility of the librarian. Last year the Health Sciences Library received 4,500 requests for service from physicans in Washington, and 300 from others in the region. This averages to about 20 requests per working day. Service has been provided to physicians in Alaska, Oregon, Idaho, Montana, and British Columbia. The Library expects to play a significant part in the Regional Medical Program.

Commenting on needs for library service, Dr. Williams reported that the licensing body in British Columbia conducted a secret ballot on raising license fees from $25 to $50 in order to support the library. The increase was approved by 65 per cent of the physicians in the province. The fund now supports district libraries and provides 100 photocopies of articles for every physician. He may purchase additional photocopies at 5 cents each.

There were 27 registrants from the faculty of the University of Washington School of Medicine and 51 others, mostly physicians in practice in Washington.

Information on the Washington-Alaska Regional Medical Program Public Law 89-239

How did the Washington-Alaska Regional Medical Program for heart, cancer and stroke develop?

Before enactment of PL 89-239, John Hogness, Dean of the University of Washington, Health Sciences Division, and Carl Schlicke, then president of the WSMA met with interested persons, with our congressmen and with Governor Evans to evaluate the proposed legislation. As a result of these and other communications the governors of Washington and Alaska, with representatives of state and local medical societies, hospitals, voluntary and public health agencies, agreed to apply for a planning grant when the law was passed. A regional advisory committee with a broad representation of interested organizations was appointed. They approved the development of regional medical program, designated the University of Washington as agent and submitted an application. A three-year planning grant was awarded September 1, 1966.

What is the objective of this new program?

The goal is to establish more effective links between the advancing frontier of medical knowledge and the world of medical practice. It is to assure the speedy delivery of the benefits of new knowledge to the consumers of medical services in all parts of Washington and Alaska.

How will this be accomplished?

Efforts will be directed toward: 1. facilitating the application of new knowledge and skills in heart disease, cancer and stroke to the health care of the people of Alaska and Washington; 2. developing cooperative arrangements among existing health institutions, so that planning, decision making, and sharing of resources will be on a regional basis; and 3. making grants to encourage and assist the development of such arrangements.

Projects that will improve diagnosis, patient care and rehabilitation or provide continuing education for physicians and other health personnel will be reviewed by the Washington-Alaska Regional Advisory Committee and, if approved, forwarded to the National Advisory Council for final approval and funding. Projects must reflect the needs described in the planning grant, be applicable region-wide and have a measurable effectiveness.

Who administers the Washington-Alaska Regional Medical Program?

A twenty-nine member regional advisory committee, which meets approximately monthly, provides leadership and guidance. It is composed of 11 physicians in private practice, three public health officials, two hospital administrators, three medical school professors, three businessmen, a businesswoman, a hospital medical director, a nurse-educator, a labor executive, a rehabilitation specialist, a dentist and a federal court judge. Dean Hogness of the school of medicine, an ex-officio member of the regional advisory committee, is also a member of the National Advisory Council on Regional Medical Programs. Cardiac, cancer, stroke and consulting subcommittees are responsible for planning programs in the respective disease categories; an executive committee reports to the advisory committee.

How important is the function of the local Advisory Committee?

It is essential. The designation of the Washington-Alaska Advisory Committee was required for the approval of the planning grant. They provide leadership and guidance and are actively involved in the review and evaluation of all planning and operational activities of the regional medical program. Their approval is required before an operational grant can be consideed for funding.

How will planning be accomplished?

Subcommittees on heart, cancer, and stroke have been meeting for the past six months to determine what information is necessary to measure the resources and needs for patient care and to make intelligent plans for improvements where indicated. State health departments of Alaska and Washington plus the medical societies, hospitals, heart associations and cancer societies of both states are participating in the planning effort.

The questionnaire regarding private physicians' practices and desires in continuing education developed by the Education and Research Foundation of the WSMA will also contribute information vitally necessary for planning.

How will the program affect the practice of medicine?

The program will afford doctors of the region increased opportunity to make available to their patients the latest advances in the diagnosis, treatment and rehabilitation of heart disease, cancer, stroke and related diseases. This will be accomplished through improved communication among the physicians, expanded programs of continuing education and training, and the strengthening of diagnostic and therapeutic resources in the two states.

The law specifies that there is to be no interference with patient-physician relationship or with administration of hospitals. No patient care is included except as a part of specific research or demonstration projects and then only when the patient has been referred by a private physician.

What is the role of the private physician?

With his colleagues he can appraise the health resources and needs in his community and indicate his desires in continuing education. In these ways he will help assure the delivery of information, resources and services which will be of practical help in caring for his patients.

How will the program affect the operation of the University of Washington School of Medicine?

The Health Sciences Division of the University is expected to assume even greater responsibilities for the continuing education and training of physicians and other health professions. The University is not alone in this responsibility, since physicians in private practice, professional societies, voluntary health agencies and community colleges will be lending assistance.

The regional medical program will assume an important role in coordinating these activities into a planned, systematic program covering significant aspects of the problem; it will encourage new and creative educational approaches and will offer financial support where needed.

Will "blue prints" be given from the federal level which are to be followed by regional medical programs?

No. The "how it is to be done" is left in the hands of local groups within the regions. The Washington-Alaska Regional Advisory Committee makes final decision.

How restrictive are the regulations?

The regulations are as flexible as possible so that local groups can develop their programs in a manner best suited to their own needs. The success of the regional medical program depends on the degree of responsibility and initiative assumed in each community.

How will the Regional Medical Program foster continuing education?

Imaginative ideas in continuing education, including new approaches in audio-visual presentations, will be utilized. Conferences, consultations, visiting staff privileges and exchanges will be encouraged. Any plan that enhances the acquisition of new knowledge and skill will be considered.

How will the continuing education activities of the program relate to current programs?

They will augment or supplement, not take over support of, current programs. Congress has made it clear that regional medical programs are to be built upon and are to utilize existing resources and strengths within the region including the education activities of universities, medical centers, hospitals, professional and specialty organizations, health departments and voluntary health agencies.

What kinds of grants does the law provide for?

Grants for planning, pilot studies and development of specific projects to carry out the goal of the Regional Medical Program.

Will the public benefit from the RMP?

We think so. In some matters there is a delay between the time new discoveries are made and their clinical applications widely known. As new knowledge becomes more readily available inequities of care should be resolved. As a result of improved continuing education to physicians and other health professions (nurses, dentists, pharmacists, physical therapists, occupational therapists, laboratory technicians, etc.) and of increased collaboration, it is hoped the most recent advances in heart disease, cancer and stroke treatment can be provided to all the people of Washington and Alaska.

What is the current status of the Washington-Alaska Regional Medical Program?

Subcommittees: cardiac, cancer, stroke and consulting committees have been organized to serve as advisory groups, document needs and make recommendations to RAC. An executive committee reports to the RAC.

> *Cardiac* Committee is developing plans for a regional gathering of cardiac data. Projects for early detection of heart disease are being studied and methods for providing postgraduate education for physicians and coronary care training for nurses are being evaluated.
>
> *Cancer* Committee is examining cancer registries and members are working to develop a more complete data collection system. They are working with junior colleges to point out need and to develop curriculum for radiology technicians, evaluating need for cytotechnologists and exploring needs in public education regarding cancer.
>
> *Stroke* Committee is examining hospital records regarding incidence, treatment, and rehabilitation. A questionnaire surveying existting facilities, services and health manpower is being compiled and plans for training nonmedical personnel to do simpler rehabilitation procedures are being considered.
>
> *Consulting* Membership represents other disciplines as well as medicine and serves to coordinate work of committees, define operational problems and recommend priorities and deadlines for the RMP.

WSMA Survey: The RMP co-sponsors with the Washington State Medical Association a survey of physicians' practices and their desires in continuing education. Preliminary questionnaires have been mailed in Washington and Alaska. The nursing profession will use the questionnaire for their purposes.

Sub-Regional Organization: Members of the RAC have visited medical communities to encourage local organization.

A committee from Yakima County Medical Society has surveyed health facilities and manpower and outlined an extensive program of ,continuing education which features teaching conferences, consultations and staff exchanges between the Seattle medical complex, Yakima and suburban communities.

Currently two committees, one in Anchorage with representatives from Fairbanks and other areas of Central Alaska, and one in Juneau with physicians from the Southeastern area have been formed. Plans are under way to obtain information regarding illnesses of Alaskans and to determine where and how they are treated. Cancer registries are being examined and expanded data collection considered.

Operational Grant Review: Regional advisory committee members are advising and assisting applicants in the preparation of operational grants to be submitted for review in the near future.

Survey of Continuing Education of Nurses: A fact-finding survey regarding training and continuing education needs of nurses has been authorized.

Conference: RAC members participated in the Washington, D.C., conference which evaluated and made recommendations regarding the legislation to Congress.

Professional Staff Recruited: The following positions have been filled:

Director—Donal R. Sparkman, M.D.
Assistant to Director—Tom R. Hornsten, M.D. (not salaried by RMP)
Research and Planning—Jack P. Kornfeld
Health Care Services—Tasker K. Robinette
Continuing Education—John Lein, M.D. (not salaried by RMP)
Information—Marion H. Johnson
Alaska Planning—Henry Akiyama, M.D. (part-time)
Alaska Planning—Robert Ogden (part-time)

Other positions for Alaska and Washington have been authorized by the Advisory Committee but are not yet filled.

How many planning grants have been awarded in the United States?

In 1966, 35 grants were awarded. Ten more expected to be added this year will bring 90 per cent of the nation's geographical area under regional planning. The states of Idaho, Wyoming, Montana and Nevada under WICHE have received a planning grant from the National Division of Regional Medical Programs.

OBITUARIES

DR. MARTIN R. JOHNSEN, *Tacoma, died Feb. 9. He was 37. Dr. Johnsen was graduated from Chicago College of Osteopathy in 1956 and received his M.D. degree from Washington College of Physicians and Surgeons in 1964. He was a member of Pierce County Medical Society and on the staff at St. Joseph's, Tacoma General, and Doctors Hospitals in Tacoma. Cause of death was meningitis.*

DR. GEORGE A. LE COMTE, *Shelton, died Feb. 5. He was 67. Dr. LeCompte was a 1933 graduate of the University of Oregon Medical School. He was licensed in 1934 and was in general practice. Cause of death was arteriosclerotic heart disease and hypertension.*

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References: Ort, F.: Adjuvant treatment of obesity with a anorectic-calorigenic agent, Clin Med 70:1999 (Nov) 1963 Isenberg, C. L.: Treatment of the overweight patient in gener practice, Clin Med 72:663 (Apr) 1965. ©1966 HAACK 1-66 MADE IN U.S.A.

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SUN VALLEY
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JUNE 28-JULY 2, 1967
SEVENTY-FIFTH
ANNUAL SESSION

Invitation to

75th
Anniversary
1893 1967

IDAHO MEDICAL ASSOCIATION

DIAMOND
ANNIVERSARY
MEETING

•

June 28 - July 2
1967
Sun Valley

featured speaker

MILFORD O. ROUSE, M.D.
122nd President
American Medical Association

special guest

MRS KARL F. RITTER
President, Woman's Auxiliary
to the
American Medical Association

Sun Valley . . .

It is a privilege to extend an invitation to physicians of the Northwest to join the Idaho Medical Association in observing our 75th Anniversary Meeting at Sun Valley June 28-July 2, 1967.

A rare opportunity in postgraduate education will be presented as distinguished scientific lecturers discuss the latest developments and newest thinking in surgery, internal medicine, obstetrics and gynecology, otorhinolaryngology, pathology and anesthesiology. Those attending will have a chance to question the speakers during an exciting Round Table discussion.

The Idaho Medical Association will be honored to present Milford O. Rouse in his first visit to a state association meeting as the 122nd President of the American Medical Association.

A full slate of activities has been arranged for the ladies by the Woman's Auxiliary to the Idaho Medical Association, highlighted by the visit of Mrs. Karl F. Ritter, Lima, Ohio, President of the Woman's Auxiliary to the American Medical Association.

The famous Idaho Formula, which has delighted guests at past meetings, will be in evidence, with mornings devoted to scientific and business sessions and afternoons left open for enjoyment of Sun Valley's unparalleled recreational facilities.

Unique social events will fill the evenings. The always popular Trail Creek Barbecue is on the schedule, as well as the President's Banquet and a performance of the famous Sun Valley Ice Show.

A Curtis Jones Jr. M.D.

A. CURTIS JONES, JR., M.D.

President
Idaho Medical Association

---

special guest speakers

PAUL B. MC CLEAVE, LL.D.
Director, Department of Medicine and Religion
American Medical Association

BERNARD D. HIRSH, LL.B.
Director, Law Division
American Medical Association

seventy-fifth annual meeting
IDAHO MEDICAL ASSOCIATION

With this annual meeting, the Idaho Medical Association celebrates its Diamond Anniversary. It promises to be a meeting of many highlights.

We of the Program Committee are excited about the outstanding people we have been fortunate enough to secure as our scientific lecturers.

Attendance by leaders of American medicine will lend distinction to the gathering at Sun Valley as will special features: discussions of *Medicine and the Law* by Bernard D. Hirsh, LL.B., Director of the AMA's Law Division, and *Medicine and Morals* by Paul B. McCleave, LL.D., Director of the AMA Department of Medicine and Religion.

All the popular features of past meetings will be with us again, and the meeting has been extended to five days to permit time for specialty sessions and another innovation, the Round Table discussion, with all guest speakers participating.

The 75th Annual Meeting will have much to offer. We hope that you will take advantage of it.

See you at Sun Valley.

RICHARD A. FORNEY, M.D.

Program Chairman

PART SCIENTIFIC — PART FUN

THE IDAHO FORMULA

Scientific Lectures

Opera House, Mornings, June 29, 30, July 1.

Featured Speaker

Milford O. Rouse, Dallas, Texas, President, AMA, Opera House, June 30.

Round Table Discussion

Guest Speakers, Sunday morning, The Study, Challenger Inn.

House of Delegates

The Lodge, June 28 at noon; June 30, morning.

Specialty Meetings

Internal Medicine, Anesthesiology, Pathology, Obstetrics and Gynecology, Surgery, General Practice. Sunday morning.

Art Show

Exhibit of work by Idaho Physicians and their families. Entries will be received Wednesday, June 28, at Registration Desk, Lobby, The Lodge.

Welcome to Sun Valley Buffet

Continental Dining Room, The Challenger Inn; preceded by Social Hour, the Lodge Terrace, Wednesday evening.

Trail Creek Barbecue

Following outdoor Cocktail Party at Trail Creek, Thursday.

"Diamond In The Rough" Dinner

On the Lodge Terrace, an Italian dinner with all the trimmings. Preceded by Social Hour. Friday evening.

President's Banquet

Lodge Dining Room, Saturday evening. Preceded by Cocktail Party at 7 p.m., followed by the Sun Valley Ice Show. Black tie. The meeting's only dress-up event.

Every Afternoon

Golf Tournament, Trap Shoot or any of a host of activities for which Sun Valley is famous—fishing, swimming, ice skating, hiking, archery, tennis, riding and more.

Registration

The Lodge, Lobby, beginning Wednesday, June 28, 1967.

Reservations

Write to Mr. Jerry D. Jones, Reservations Manager, Sun Valley.

. . . at sun valley--June 28--July 2, 1967

Scientific Lecturers

ERIC M. NANSON, M.D.

Professor of Surgery, University of Saskatchewan

Chest Injuries — Their Recognition and Management
Post-Phlebitic Leg and Varicose Ulceration
Handling of Carcinoma of the Thyroid Gland

OGLESBY PAUL, M.D.

Professor of Medicine, Northwestern University Medical School

The Myocardopathies
The Management of Cardiac Arrhythmias
Long-Term Observations in Coronary Heart Distress

MALCOLM B. DOCKERTY, M.D

Professor of Pathology, University of Minnesota, Mayo Foundation Graduate School

Colonic Polyps—Benign or Malignant?
Ovarian Cysts
Ovarian Solid Tumors

WALTER P. WORK, M.D.

Professor and Chairman, Department of Otorhinolaryngology, University Hospital University of Michigan Medical Center

Masses in the Neck
Tumors of the Major Salivary Glands
Peripheral Facial Nerve Palsies

WILLIAM K. HAMILTON, M.D.

Professor and Head, Department of Anesthesia, University Hospitals, University of Iowa

Arterial Oxygen Levels Are Normal—So What!
Respiratory Complications of Port-Operative and Immobile Patients
Clinical Usefulness of Venous Pressure Monitoring

KERMIT E. KRANTZ, M.D.

Professor and Chairman, Department of Obstetrics and Gynecology, Professor of Anatomy, University of Kansas Medical Center

You as a Symbiont—the Newest Concepts of Placental Physiology and Their Clinical Significance
What Controls Tilly's Water, or the Problems of Stress Incontinence in the Female

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PRESIDENT *A. Curtis Jones, Jr., M.D., Boise*
SECRETARY *William R. Tregoning, M.D., Boise*
EXECUTIVE SECRETARY *Mr. Armand L. Bird, Boise*
Annual meeting, June 28-July 1, 1967, Sun Valley

New State Offices

The state offices have moved. The new address is 407 West Bannock Street, Boise.

The welcome mat is out. The coffee pot is on. A warm invitation is extended to you to come by and see your investment. The staff will be on hand to greet you from 8 a.m. to 5 p.m., Monday through Friday and until noon on Saturday.

Political Action Committee Meeting

The Board of Directors of the Idaho Medical Political Action Committee met March 18 in Boise to review the 1966 political efforts and to consider plans for activities in the 1968 campaign. G. E. Rosenheim, Boise, chairman, conducted the meeting, and Blair Henningsgaard, Astoria, Oregon, the new National Chairman of AMPAC, attended.

Members of the committee are Max D. Gudmundsen and George E. Weick, Boise; Dan E. Stipe, Lewiston, and Mrs. Glen M. Whitesel, Coeur d'Alene; Harry D. McGee, Pocatello; Harwood L. Stowe, Twin Falls; and Leland K. Krantz, Idaho Falls. Executive Secretary Bird, Mr. Richard G. Layton, Field Representative for AMPAC, and Mr. Jerry Gould, AMA Field Representative, attended the session.

State Board of Medicine Section

One physician was granted a Temporary License during the month of March. He is Richard W. Lomas, Renton, Washington. A graduate of Western Reserve University School of Medicine, Cleveland, Ohio, June 12, 1957, he interned at University of Colorado Medical Center, (Colorado General Hospital), Denver, 1957-58, his residency in Ophthalmology was at New York Eye and Ear Infirmary, 1958-61. Granted TL-383, March 18, 1967, Ophthalmology.

Fifty-six at Winter Clinics

Fifty-six physicians registered for the annual Winter Clinics of the Ada County and Southwestern Idaho District Medical Societies at McCall. G. E. Rosenheim, Boise, President of the Ada County Medical Society, was banquet Toastmaster. Presiding over scientific sessions were Oaks H. Hoover, Caldwell, president of the Southwestern Idaho District Medical Society; A. Curtis Jones, Jr., Boise, president of the Idaho Medical Association, and James R. Kircher, Burley, president-elect of the Idaho Medical Association.

Dr. Warren Cole Guest Lecturer

The Boise Valley Chapter, American College of Surgeons met May 6 in Boise. Warren G. Cole, Chicago, Professor Emeritus, Department of Surgery, University of Illinois College of Medicine was guest lecturer. His topic was "Dissemination of Cancer."

The Program was arranged by Richard O. Vycital, Boise, secretary, and J. Leslie Montgomery, Caldwell, president. Other speakers on the program were Everett N. Jones, Jr., Hugh V. Firor, Maurice M. Burkholder, Glenn E. Talboy, all of Boise; Arthur S. Dole and Arthur M. Palrang, Caldwell; Robert A. Blome, Nampa, and A. Scott Earle, Sun Valley.

Indian Health Advisory Committee

O. V. Baumann, Lewiston, chairman, and members of the Association's Indian Health Advisory Committee met March 28 in Boise to confer with Idaho tribal leaders. Members attending were Carter V. Beghtol, Orofino, and Gilbert A. Bacon and Taylor F. Cottle, both of Pocatello.

continued on page 514

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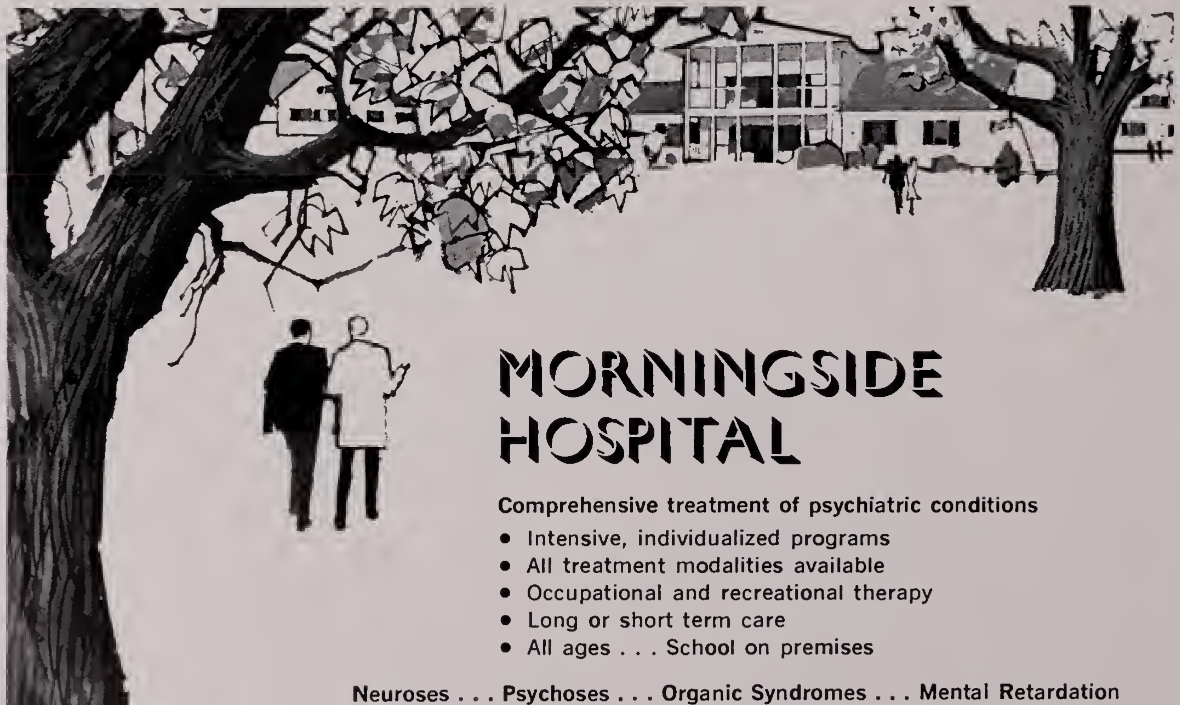

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Contraindications: Severe coronary artery disease, hyperthyroidism, severe hypertension, nervous instability, and agitated prepsychotic states. Do not use with other CNS stimulants, including MAO inhibitors.
Warning: Do not use during the first trimester of pregnancy unless potential benefits outweigh possible risks.
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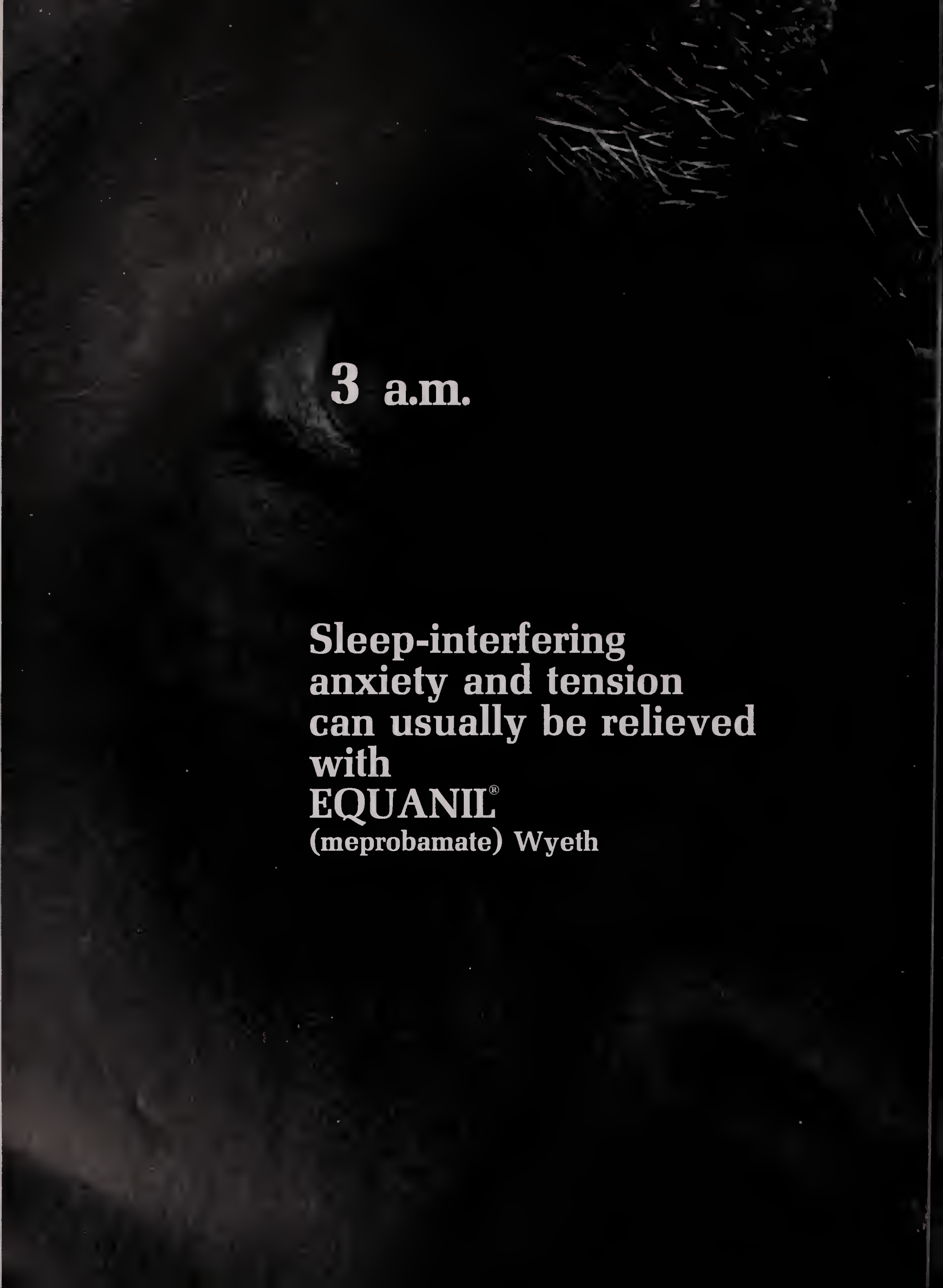

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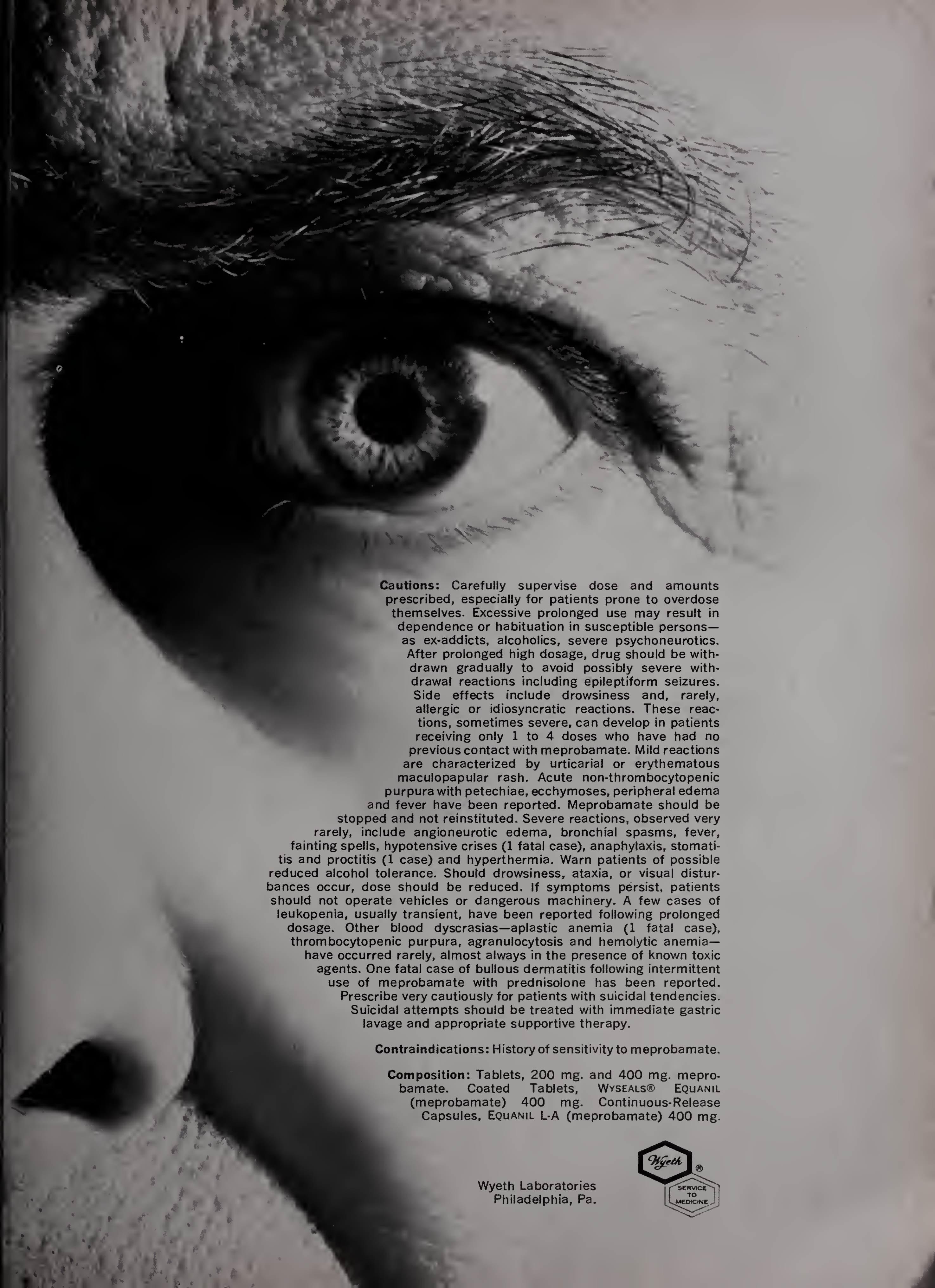

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. Meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leukopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, Wyseals® Equanil (meprobamate) 400 mg. Continuous-Release Capsules, Equanil L-A (meprobamate) 400 mg.

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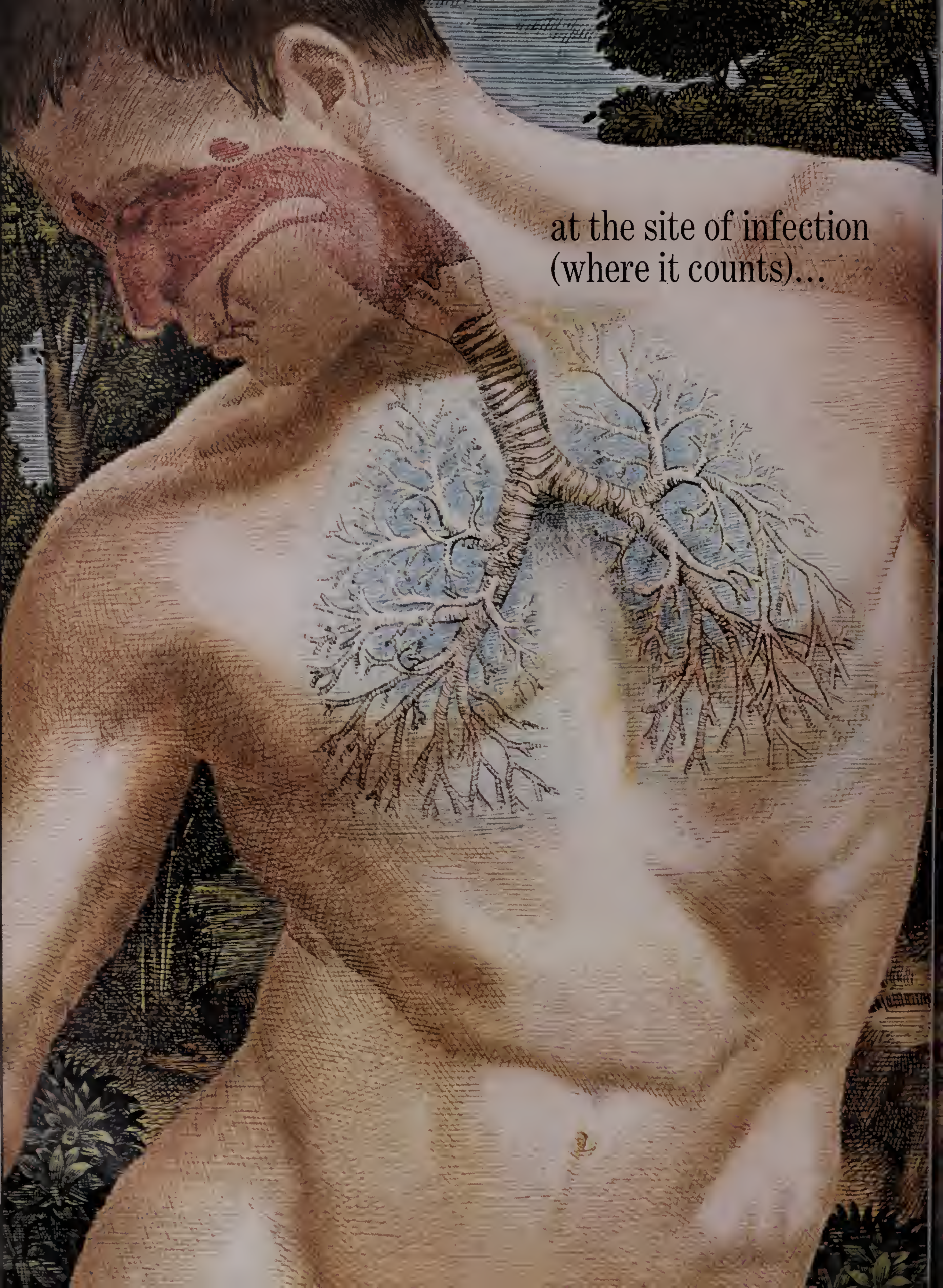
at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 t to 2 Gm. of the drug daily for periods of two to six months, an patients with rheumatic fever have taken prophylactic doses o 0.5 Gm. daily for two years without difficulty. In one group o 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episode of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels wer determined in a group of fifty-four adults and children who too 250 mg. of Ilosone daily for an average of sixteen months a rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevatio of SGPT and serum alkaline phosphatase levels during the cours of treatment was observed in one patient treated with Iloson and in two patients treated with penicillin. Seven other patient in the group receiving Ilosone and four others in the penicilli group showed elevations in one of the tests at some time durin administration of the drugs.

Very satisfactory therapeutic results, without toxicity, wer reported in 102 pediatric patients who received short-term (ten day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had receive penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a resul of a local stimulating effect of the medication on the alimentar tract; however, the normal intestinal gram-negative bacteria flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the us of erythromycin, there have been occasional reports of urticaria skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of bod weight, the usual dosage is 5 mg. per pound every six hours; fo children twenty-five to fifty pounds, 125 mg. every six hour (Tablets Ilosone Chewable should be chewed or crushed an swallowed with water.)

For adults and for children over fifty pounds, the usual dosag of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromyc therapy should be considered.

In the treatment of syphilis, the recommended total dosage 20 to 30 Gm. given in divided doses for a period of ten to fiftee days. Close follow-up of the patient is necessary since erythr mycin drugs have not had adequate evaluation in all stages syphilis. Examinations of spinal fluid are recommended as pa of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days a recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examinati before receiving antibiotics, and monthly serologic tests shou be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 m (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-c size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivale to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size package

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247:*69, 19
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12:*398, 19
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239:*198, 1960

Additional information available to physicians upon request.
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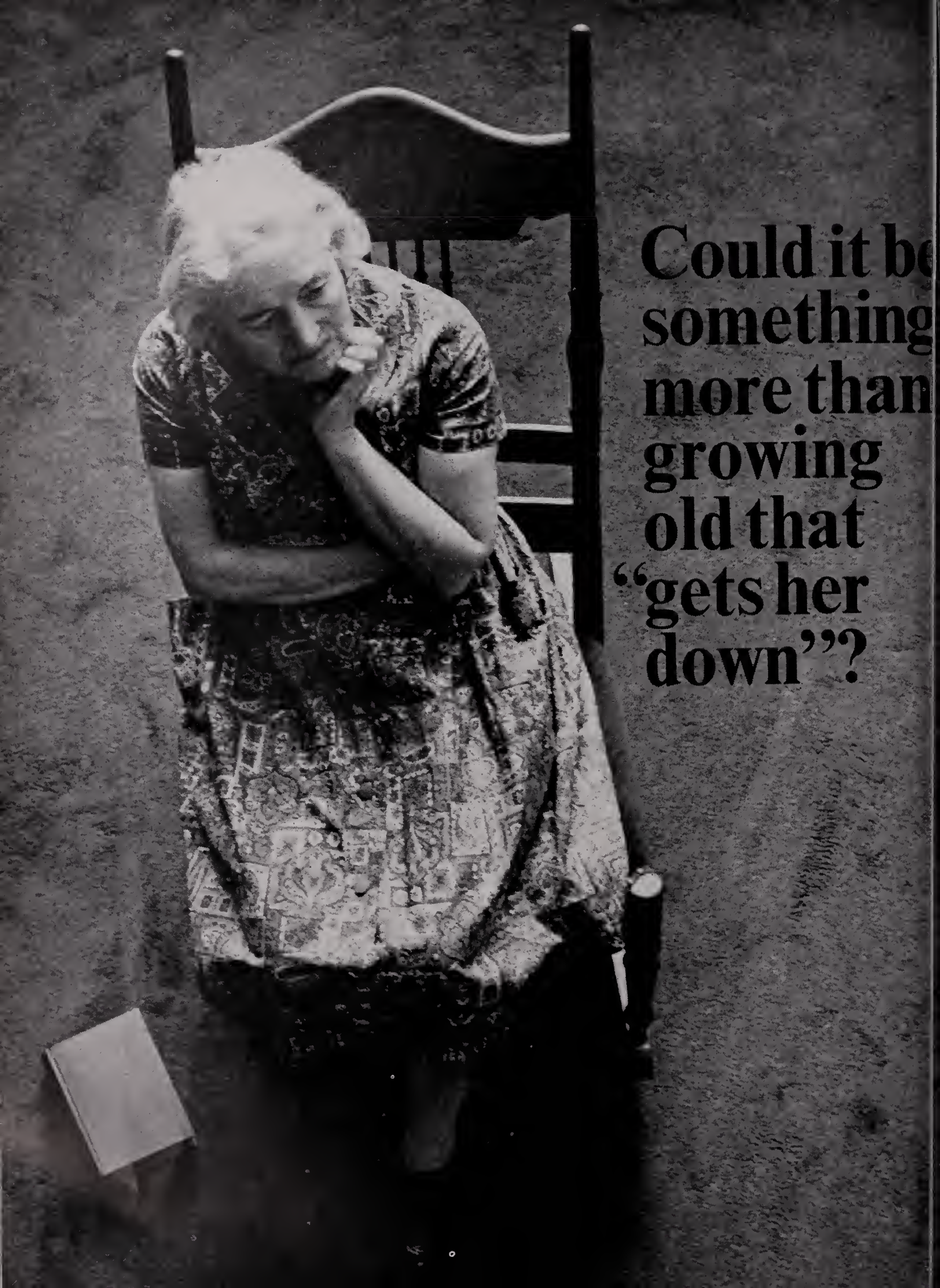
Merle M. Kurtz, M.D.
Marvin J. Weinstein, M.D.
Norris H. Perkins, M.D.

John W. Evans, M.D., **Consulting Psychiatrist**

Physicians


Could it be
something
more than
growing
old that
"gets her
down"?

Mild mood depression, poor appetite, little interest in the present or future. Does this picture mean that she's giving in to functional fatigue?

When functional fatigue is part of her problem, Alertonic can help counteract accompanying apathy and inertia. It helps lift mood, stimulate appetite, and establish new interest in daily life.

Pleasant-tasting Alertonic combines pipradrol hydrochloride—a gentle cerebral stimulant—with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals ...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Available only on prescription

Alertonic®

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%, pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

Merrell

THE WM. S. MERRELL COMPANY
Division of Richardson-Merrell Inc.
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continued from page 501

New Members

Physicians elected to membership in component medical societies are: Sydney A. Horrocks, Pocatello, Southeastern Idaho District Medical Society and George E. Brown and John T. Mitchell, Idaho Falls, Idaho Falls Medical Society.

OBITUARY

DR. MICHAEL J. HAMILTON, *42, Redding, California, died March 26.*

Dr. Hamilton was born in Boise, June 6, 1924, and attended Boise elementary and secondary schools. He attended Creighton University at Omaha, Nebraska, and received his M.D. degree from Creighton University Medical School in 1952. He practiced medicine in Nez Perce and Sandpoint from 1954 until 1956 and completed his residency in orthopedics at the Mayo Clinic.. He moved to California in 1959 and practiced at Redding until his death.

He was a former member of the North Idaho District Medical Society, the Idaho State Medical Association, the American Medical Association and a past president of the Northern California Medical Association.

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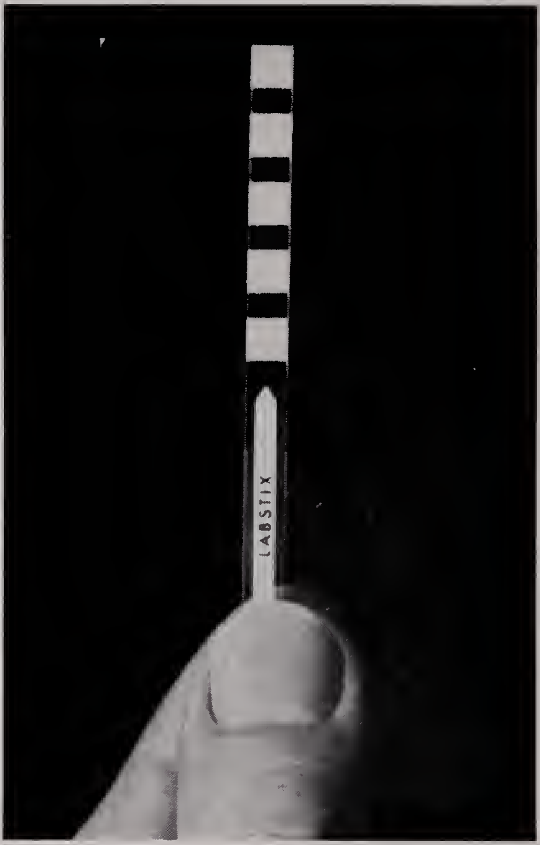

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*Blood; ketones; glucose; protein, and pH.

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X-Ray of the Month on Page 471

Note the presence of a rather extensive collection of soft tissue gas and the bone destruction at the distal aspects of the fifth metatarsal bone and the proximal phalanx of the fifth digit. Arteriosclerotic calcification of the foot vessels (which is a radiographic clue to the diabetes) is not shown.

Accumulation of air in soft tissues can be easily seen in roentgenograms and may be in the form of small bubbles or in linear streaks when the gas collects along fascial planes.

Air may gain entrance through a traumatic wound or following a surgical procedure. It may be formed as a result of anaerobic bacterial action.

Clostridial organisms are usually implicated in crepitant infections; but, especially in the diabetic patient, a variety of streptococcal and enteric, gram-negative bacteria may be responsible. The vascular disease of diabetes produces considerable circulatory impairment to extremities and the resultant tissue ischemia is a significant predisposing factor to the development of anaerobic infection. Increased tissue glucose may enhance gas production of such organisms, and accumulation of gas may occur because of delayed absorption.

Diagnosis: Osteomyelitis and Gas Bacillus Infection in a Diabetic.

General News

International Course On Recent Advances in Neonatology

A course focusing on recent advances in the care of newborn infants will be held in Athens, Greece, Sept. 15-20. The international course will emphasize clean, succinct presentations of practical value in the care, diagnosis, and treatment of diseases of the newborn patient.

On the American faculty will be Thomas K. Oliver, Jr., Professor of Pediatrics and Head, Division of Neonatal Biology, University of Washington School of Medicine. Others from American schools will be Marvin Cornblath, Professor of Pediatrics, University of Illinois College of Medicine; Jerold F. Lucey, Associate professor of Pediatrics, University of Vermont College of Medicine; Sydney S. Gellis, Professor of Pediatrics, Tufts University School of Medicine; and Robert Smith, Professor of Pediatrics, University of Florida College of Medicine.

Tuition for the five-day course (25 hours) is $80. A group jet air fare rate is available for participants and their families, leaving New York City Sept. 11 and returning Sept. 29. For further information contact the Vermont Transit Travel Bureau, 137 St. Paul Street, Burlington, Vermont 05401.

CLASSIFIED ADVERTISEMENTS

All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than 20th of month preceding date of issue. Proof is not shown. Copy of add as it appeared in the journal accompanies billing.

PRACTICE OPPORTUNITIES

EXCELLENT GP OPPORTUNITY TO ASSOCIATE—With 2 very busy practitioners. One with residency in surgery preferred. Choice of hospital facilites. Seattle area with the finest boating and fishing available. Write Box 3-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

SURGICAL PRECEPTORSHIPS—Open July 1, 1967, for one or two year appointments. American Board credit if three years residency completed. Oregon license required for 2nd year but not the 1st. If foreign graduate, ECFMG and permanent visa required. Salary $800 per month. N. W. Frink, M.D., Permanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

PHYSICIAN WANTED—To become associated with group doing full-time industrial practice. An equal opportunity employer. Income range depending on qualifications, $15,000-$20,000 plus liberal fringe benefits. Regular hours. Good living conditions and good climate in a Washington State growth area. Write Box 29-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

GENERAL PRACTITIONER — For well-established 14-man group. New building, adjacent excellent hospitals. Starting salary $15,000 or more, early partnership. Practice high quality medicine. Enjoy the Puget Sound country. Write or phone collect: T. J. Smith, M.D., Western Clinic, 521 So. K, Tacoma, Wash. 98405.

OPENING AVAILABLE—Full time staff physician Veterans Administration Out-patient Service. Duties consist of compensation and pension examinations, out-patient care of service-connected veterans. Annual leave 30 days, liberal retirement benefits, salary dependent on qualifications. Contact Chief, Out-patient Service, Rm. 712, Smith Tower, Seattle, Phone MA 4-7200.

EMERGENCY ROOM PHYSICIANS—Desire group of 3 to 4 physicians for 24-hour, 7-day-week coverage. Downtown Seattle 300-bed general hospital and medical center. Presently expanding to 500 beds. Excellent growth potential. Guaranteed base income. Write Box 30-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

GENERAL PRACTITIONER—Needed immediately. Present physician leaving. Well-equipped clinic available. Licensed 23-bed hospital. Draws from an area of 3,000 people. Year-round recreation. Diversified industries. Write Mrs. Roberta M. Garrett, R.N., Administrator, Mt. Linton Hospital, Metaline Falls, Wash. 99153.

OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

LOCUM TENENS—For busy suburban obstetrical and gynecological practice, Sept. 9, to Oct. 7, 1967. Opportunity for resident to associate later. Write Z. Joseph Vozenilek, M.D., 6343 Motor Ave., S.W., Tacoma, Wash. 98499.

GENERAL PRACTICTIONER— Handicapped or semi-retired to work 10-12 days monthly in small farming town on straight salary to relieve only physician covering area of 2,000. Modern 15-bed hospital. Lower cost of living. Thirty miles to specialized facilities. Write Box 32-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

EXCELLENT GP OPPORTUNITY TO ASSOCIATE— With 3 very busy practitioners. One with residency in surgery preferred. Financial arrangements open. Fully equipped office, good hospital facilities. Pacific Northwest, mouth of Columbia River, Astoria, Oregon. Write Box 31-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

EXCELLENT OPPORTUNITY FOR PEDIATRICIAN— Adjacent to office of G. P. We will finish new building to your specifications. Successful practice assured in fast growing area adjoining Lakewood in Tacoma. Call Mr. Richards, H. A. Briggs Co., JU 8-5227, Tacoma, Wash.

GENERAL PRACTITIONER WANTED—To take over fully equipped and air conditioned ground floor office of recently deceased M.D. Two fully accredited 100-bed hospitals. Center of large wheat and cattle country and division point of Great Northern Railway. Can rotate weekends off with 3 other GP's. Contact N. A. Franken, M.D., Medical Arts Bldg., Havre, Montana 59501.

ORTHOPEDIST—For 65-man clinic. Starting income $30,000 per year, regular increases for 10 years. Insurance benefits, retirement program. Norman W. Frink, M.D., The Pemanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

URGENT NEED FOR ONE OR TWO GP'S— Chewelah, Wash. Population 1,600, 60 miles north of Spokane. Serves So. Stevens County with about 4,000 residents. Wonderful recreational area. Excellent 34-bed very busy hospital, and A.H.A. approved. Two doctors now approaching retirement, and would offer 100% cooperation to qualified, dedicated M.D.'s. Office space and housing available. Contact Ted Schlosser, Pharmacist, M. B. Snyder, M.D., or Karl J. May, M.D., Chewelah, Wash. 99109.

MEDICAL CENTER IN WESTERN WASH.—Has an opening for an internist and a dermatologist in a medical specialty group. City expanding rapidly with big industry and future outlook very promising. Climate and recreational facilities are excellent. Write Box 15-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

SITUATIONS WANTED

OTOLARYNGOLOGIST—Board certified, service obligation complete, seeks association or group practice in larger community in Northwest. Write Box 23-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

INTERNIST—With additional training in cardiology seeks position in Seattle area, July 67. Write Box 28-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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PHYSICIAN'S OFFICE—Located at 3601 So. McClellan St. Reception room, private office with outside entrance, consultation room, 2 examining rooms, x-ray processing room and ample storage cupboards. Contact Henry Broderick, Mr. Marvin Bush, Second and Cherry, Seattle, Wash.

UNFINISHED OFFICE SPACE—In a clinic building now under construction across the street from Overlake Hospital, Bellevue, Wash. GL 4-8111.

MODERN MEDICAL OFFICE—Of 1,000 sq. ft. available at Kenmore, Wash. Call LA 4-1867 or EM 3-3240.

FULLY-EQUIPPED PHYSICIAN'S OFFICE—Columbia City, 4906 Rainier Ave. S., Seattle. Area urgently needs a replacement for late physician who occupied this office 15 years. Rental $105 per month. Contact K. B. Watkins, PA 2-4878 after 5 pm.

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FOR SALE COMPLETE MODERN OFFICE EQUIPMENT—Apparatus and furniture, all in first class condition. Also available 200 ma motorized table x-ray unit plus x-ray accessories. Owner leaving for residency. Write Box 21-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

REAL ESTATE

FOR SALE BY OWNER—4 lots with beautiful A-frame chalet-type summer home on lake shore east of mountains. Fireplace, propane gas floor furnace, range, water heater, electric refrigerator. Modern bath. Lovely view, peace and privacy. 100′ well with pressure system, excellent water. Ph. VA 2-0784 or write Mrs. Grace Cox, 6350 Lakeview Dr., Kirkland, Wash. 98033.

Meetings OF MEDICAL SOCIETIES

AMA Annual—June 18-22; Atlantic City, 1967; San Francisco, 1968.

AMA Clinical—Houston, 1967; Miami Beach, 1968.

Oregon Medical Association—Sept. 19-23, 1967, Portland

Washington State Medical Association—Sept. 10-13, 1967, Seattle

Idaho State Medical Association—June 28-July 2, 1967, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society—Annual Meeting, Sept. 24-27, 1967. Salishan, Gleneden Beach, Oregon
Pres., John W. Whitelaw, Vancouver, B.C.
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy
Pres., Wallace Lindahl, Seattle
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association
Pres., Frank C. Henry, Seattle

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
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West Coast Allergy Society—Nov. 30-Dec. 2, 1967, Phoenix, Arizona
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Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.).
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
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Oregon Radiological Society—University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
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Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
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Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Frederick R. Asbury, Corvallis
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Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres , J. A. Siebs, Eugene
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Oregon Urological Society—Quarterly Meetings, Congress Hotel, Portland
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Meetings continued

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High Time for Concerted Effort

Editor, NORTHWEST MEDICINE:

The guest editorial on alcoholism—"The Ostrich Approach"—in the May issue has called our attention to a perplexing and needy problem.

It is particularly appropriate for medicine in the Northwest to consider alcoholism more carefully at this time, for a test case is currently pending decision before the State of Washington Supreme Court. This case argues that a person who is a chronic addictive alcoholic is by definition medically ill. If such an alcoholic is publicly intoxicated his condition represents a product of his disease state. Therefore, it is illegal to arrest such a person on criminal charges. Rather, if he is taken into custody because of public intoxication he must be remanded to medical treatment facilities.

As many readers know, several state and federal courts have ruled in favor of this argument. As a consequence many cities and states are now faced with *really* providing *adequate* treatment facilities for alcoholics.

This effort will take the combined efforts of both private and public facilities, for alcoholism is both widespread and virtually untreated. The editorialist's assertion of medical neglect is only too true. In a survey of medical school curricula only a bare half-dozen schools reported any systematic teaching or clinical experience in the treatment of alcoholism. In a recent survey of Seattle physicians, only 3 per cent reported that they had adequate knowledge about alcoholism and were willing to treat alcoholics.

Yet the fact is that alcoholism is a treatable illness. The common stereotype of the alcoholic as a skidroad bum is false. Only 5 per cent of alcoholics are of the skidroad type, and less than 10 per cent of skidroad habitues are alcoholics. The typical alcoholic has a home, family, job, belongs to a church or lodge, and might well be one's neighbor. Successful treatment programs have focused on the alcoholic in the treatable stage, and they consistently report rehabilitation rates of 70-80 per cent. Alcoholics pay their bills; 95-99 per cent paid their total charges in two facilities in Seattle this past year.

Alcoholics are often difficult patients to treat—there is no denying that fact. However, it is often the attitude of the physician that blocks successful treatment, not the attitude of the patient. The editorialist suggests that we view alcoholism as an addiction, which it is. Yet he suggests that alcoholism is not a disease. This I find puzzling, because drug addiction is a seriously disabling affliction. It is probably a semantic quibble whether we choose to label addiction problems as diseases or problems in living. The point is that punishment, whether by imprisonment or social ostracism, does nothing to rehabilitate the addict. In fact, the most successful treatment programs for both alcoholics and drug addicts have been community-based programs of social rehabilitation within the community of the person.

The editorialist's recommendation for mobilizing active committees on alcoholism in each local medical society deserves hearty endorsement. Such committees could address themselves to three levels of prevention of alcoholism.

Primary prevention would be aimed at community education regarding drug use and abuse. We have heard much of the dangers of alcohol, but that will not prevent alcoholism. Rather we need to influence community attitudes toward drinking and patterns of alcohol consumption. We need to develop healthy and wholesome social attitudes toward alcohol. Unless our young people are taught appropriate methods of handling alcohol we shall continue to breed a new and larger crop of alcoholics each generation.

Secondary prevention would focus on the early detection of alcohol problems. Traditionally we have waited until alcoholic deterioration has become obvious. This is too late. We need to detect incipient problems with alcohol in persons who are not yet alcoholic. Here the family physician can be a key agent in case detection and early case management.

Tertiary prevention would aim at providing adequate facilities for rehabilitation and not merely "drying out." There is a crucial need for half-way hourses, personal and family counseling centers, and hospital-based treatment wards. According to numerous recent reports from across the nation, alcoholics are being admitted in number and successfully managed on general hospital ward units. In fact, we all know of many cases of "acute gastritis," "avitaminosis," and "chronic dehydration," that are treated on general medical wards. Unfortunately, the treatment stops with the "drying out."

continued on page 530

In managing tense, anxious patients here's one combination that makes sense: your understanding counsel and **Serax**®
(oxazepam) Wyeth

When prescribing, carefully observe dosage recommendations and appropriate precautions, especially as pertaining to the elderly (see Wyeth literature or PDR as well as "IN BRIEF" below).

IN BRIEF.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leucopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age.

These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10, 15 and 30 mg. oxazepam.

Photograph posed by professional models.

To help you relieve anxiety and tension

Serax®
(oxazepam)

Wyeth Laboratories Philadelphia, Pa.

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Yet that is just when the treatment of alcoholism can begin. It is not unreasonable to assert that each community can and should have hospital wards that welcome alcoholics for treatment as a first step on the pathway to recovery.

As the editorialist has suggested, it is high time that our local and regional medical societies apply concerted effort to mobilize medical treatment for the alcoholic and pressure our respective legislative bodies, whether city, county, or state, to assist with appropriate laws, tax support, and public interest.

E. MANSELL PATTISON, M.D.
Coordinator for Social and Community Psychiatry; University of Washington School of Medicine.

The Virtues of Whisky

Editor, NORTHWEST MEDICINE:

I should like to comment on the guest editorial by Harold Holsinger, in the May issue, but the appended quotation does it far better than I could.

CARL P. SCHLICKE, M.D.

THE VIRTUES OF WHISKY

He distingisheth three sortes thereof—*Simplex, Composita, Perfectissima.* Beying moderately taken, sayeth he, it sloweth age, it strengtheneth youth; it helpeth digestion; it cutteth fleume; it abandoneth melancholie; it relisheth the harte; it lighteneth the mind; it quickeneth the spirites; it cureth the hydropsie; it healeth the strangury; it pounceth the stone; it repelleth gravel; it puffeth away ventositie; it keepyth and preserveth the hed from whyrlyng—the eyes from dazelyin—the tongue from lispying—the mouth from snafflying—the teeth from chatteryng — the throte from rattlyng — the weasan from stieflyng — the stomach from womblyng—the harte from swellng—the bellie from wirtching—the guts from rumblying—the hands from shivering—the sinoews from shrinkyng—the veynes from crumplyng—the bones from akyng—the marrow from soakyng—and trulie it is a soveraign liquor *if it be ordelie taken.*

From *Holinshed's Chronicles* of 1578.

Physicians in Viet Nam

Saigon, October 23, 1966

Editor, NORTHWEST MEDICINE:

On Tuesday, Oct. 18, 1966, at 8 o'clock we boarded a C-47 (DC-4 without seats or upholstery) and taxied from the Air American terminal at Tan Son Nhut airport. After taking off we headed in a northeasterly direction. In about an hour we landed at Ban Me Thout to discharge some cargo and passengers and then flew north for 45 minutes and arrived at Pleiku.

Pleiku, about 2,500 feet above sea level, is on a plain and is surrounded by mountains. It is the headquarters for military operations in region two which is the largest of the four areas into which the country is divided for administrative purposes. The airfield is large and busy. Looking out in any direction, military encampments can be seen.

I was met and taken in a jeep to the province hospital. Manning the hospital is a team consisting of two United States Army physicians and six enlisted personnel who assist the doctors in their duties. There is also one volunteer physician who is donating his time, energy and talents to assist in providing medical care for the civilians, a Vietnamese physician, who is the Chief of the team, and two midwives.

The hospital consists of several small buildings in a grove of beautiful trees. Except for the surgical suite, which is new, all of the buildings are ancient, of French design and in need of repair. There has been little maintenance and no modernization since they were constructed more than 50 years ago. There is no running water; no sanitary facilities. There is a water tower that can be filled when there is sufficient electric power to run the pumps, and this supplies the water for the surgical suite. There are about 150 beds in the hospital and an average patient census of 250. Like other hospitals in Vietnam, two patients to a bed is the rule. Occasionally there are three patients to a bed. To me it is amazing to see what can be accomplished by the medical team under such handicaps.

Eighty per cent of the population of the region around Pleiku are Montagnards. They are of a different ethnic extraction than the Vietnamese. There are many tribes of Montagnards inhabiting the mountainous region of Indochina, and there are two basic types with many variations as well as many similarities. One root of the extraction seems to be Mon-Khmer in origin and the other Malayo-Polynesian. There are at least 12 main tribes and many sub-tribes. Each tribe has it's own characteristics and each a different language. Even those who speak the same language often have different social, religious and agricultural customs. The Montagnard life centers in the village. It is the important political, social and economic unit. The villager's life is conditioned by the immediate environment; he knows that environment well but little beyond. Despite the language differences, one tribe can usually communicate with another.

The typical house is a simple bamboo and wood structure on pilings with a thatched roof. A long center corridor divides the interior, with compartments on each side. Each room houses a standard,

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Soyalac SOLVES THE PROBLEM

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Baby has a thing or two to say about a hypo-allergenic, milk-free diet!

Soyalac is the good-tasting, fibre-free formula that infants readily accept. The exclusive Soyalac process results in a consistency much like milk, with a light, creamy color—and nut-like flavor but without a trace of sediment.

Soyalac satisfies the infant. Strikingly similar to mother's milk, it provides protein of high biologic value and balanced nutrients. Clinical data furnish evidence of Soyalac's excellence in promoting normal growth and development.

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or polygamous family, usually with its own hearth. In addition, the house contains a larger common room for family gatherings and the reception of guests.

Most impressive is the village communal or bachelors' house. It is large, carefully constructed, elaborate, and centrally located. It often serves as the ritual center of the village, the place where unmarried young men sleep and learn the ways of their elders, and as the mobilization center for war. Women are taboo here.

The third important structure of the village is the spirit house. It is usually small, and most often dedicated to the spirit of the soil.

The head of the family is not necessarily the man. Some tribes have matrilineal systems and in at least one tribe leadership goes to the more forceful of the spouses. Polygamy is permissable but is rarely practiced. Usually, only the wealthy can afford to keep more than one wife; and even then permission must be obtained from the first wife. The first wife remains dominant in the household, and her eldest son is the eldest son of the house. Second and third wives are treated more like concubines. Some tribes also premit polyandry.

Tensions have always existed between the Montagnards and the Vietnamese, who look on the Montangnards as uneducated, primitive barbarians. When the French conquered Indochina, they set up one administrative apparatus for the Montagnards and another for the Vietnamese. This plan effectively isolated the Montagnards from the Vietnamese.

While the Montagnards have accepted the Americans, to whom they are loyal and respectiful, much of their animosity for the Vietnamese remains and they have been unwilling to accept domination from them.

In August, 1964, the Montagnard tribes formed a coalition of "United Front of Struggle for the Oppressed Race." This coalition is called "FULRO." In the September 11, 1966, elections, a certain number of seats in the new Constitutional Convention were allocated to the Montagnards so that they will have a voice in the new government.

This week (October 16 to 22), FULRO called a big celebration which was held in Pleiku. Monday, Oct. 17, was the big day for the ceremony. A bull was sacrificed in the Montagnard tradition. Premier Ky and most of his cabinet attended the ceremony. Gifts and honors were exchanged and I believe that a new era with mutual admiration and assistance and cooperation is here.

When I arrived in Pleiku on October 18 the ceremony was still in progress. It was with a great deal of regret that my schedule would not permit me to attend.

The dress of the Montagnard man is usually a cloth around the waist and one end pulled through the crotch. Often a colorful blanket, much like those

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Tandearil®
oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.

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Ardsley, New York

Geigy

Tandearil®
oxyphenbutazone

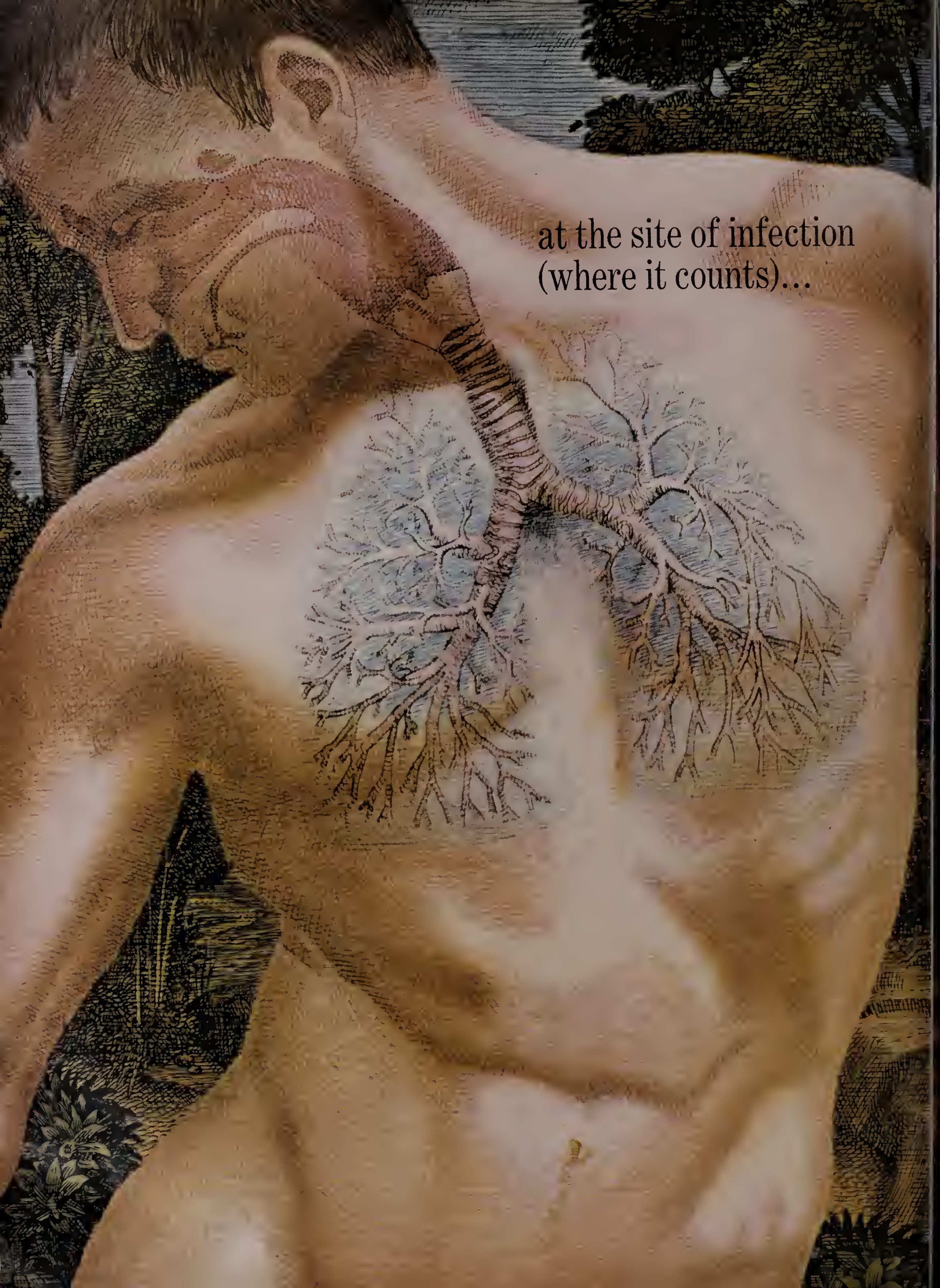
helps osteoarthritic joints move again

3 out of 4 osteoarthritics completely or markedly improved

Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964.	76.9% of 407 patients
Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966.	84.6% of 39 patients

Please see adjoining page for brief prescribing summary

TA-4919 PC


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed... Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

700121

Ilosone®

Lilly

Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Side-Effects: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have appeared in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly if the drug is readministered to sensitive patients, usually within forty-eight hours. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevate alkaline phosphatase levels, negative or weakly positive cephali flocculation and thymol turbidity tests, elevated serum glutami oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has no been reported in other patients taking prolonged courses of th medication. Patients with chronic infection have been given 1 t to 2 Gm. of the drug daily for periods of two to six months, an patients with rheumatic fever have taken prophylactic doses o 0.5 Gm. daily for two years without difficulty. In one group o 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of thes patients' families, who were not taking the drug, had episode of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels wer determined in a group of fifty-four adults and children who too 250 mg. of Ilosone daily for an average of sixteen months a rheumatic fever prophylaxis. The results were compared wit those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevatio of SGPT and serum alkaline phosphatase levels during the cours of treatment was observed in one patient treated with Iloson and in two patients treated with penicillin. Seven other patient in the group receiving Ilosone and four others in the penicilli group showed elevations in one of the tests at some time durin administration of the drugs.

Very satisfactory therapeutic results, without toxicity, wer reported in 102 pediatric patients who received short-term (ten day) courses of Ilosone in the treatment of streptococcus infec tions. Results of liver function tests in these patients were com parable to those in a similar control group who had receive penicillin.

Gastro-intestinal disturbances not associated with hepatic ef fects are observed in a small proportion of individuals as a resul of a local stimulating effect of the medication on the alimentar tract; however, the normal intestinal gram-negative bacteria flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the us of erythromycin, there have been occasional reports of urticari skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.
Ilosone Pulvules®
Ilosone Chewable Tablets
Ilosone Drops
Ilosone, 125, for Oral Suspension

For infants and for children under twenty-five pounds of bod weight, the usual dosage is 5 mg. per pound every six hours; fo children twenty-five to fifty pounds, 125 mg. every six hour (Tablets Ilosone Chewable should be chewed or crushed an swallowed with water.)

For adults and for children over fifty pounds, the usual dosag of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromyci therapy should be considered.

In the treatment of syphilis, the recommended total dosage 20 to 30 Gm. given in divided doses for a period of ten to fiftee days. Close follow-up of the patient is necessary since erythr mycin drugs have not had adequate evaluation in all stages syphilis. Examinations of spinal fluid are recommended as pa of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days a recommended. In the treatment of gonorrhea, patients with suspected lesion of syphilis should have a dark-field examinati before receiving antibiotics, and monthly serologic tests shoul be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 m (equivalent to base), in bottles of 24 and 100.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base in bottles of 50.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-c size packages, with dropper calibrated at 25 and 50 mg.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivale to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size package

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247:*69, 19
2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12:*398, 19
3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239:*198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

7001

continued from page 532

formerly worn by our American Indians, is thrown across the shoulder. The women wrap a cloth around the waist and the blanket or shawl across the shoulder. Woven baskets with loops to go around the shoulders are carried by both men and women on their backs and are used to carry all manner of materials. The native weapon is a cross-bow. They come in various sizes and are very accurate. The arrows are bamboo that has been sharpened, pointed and hardened. On the other end, heavy small portions of leaves have been inserted into the arrow and these serve the same purpose that the feathers do on the arrows of our American Indians. The tips of the Montagnards arrows are at times also dipped in a poison.

The Montagnard children begin to do their share of the daily tasks at an early age. They seem most friendly and never miss a chance to wave at the Americans as they drive by.

While there is a lot of Viet Cong action in the mountains, where the communists come through Cambodia, there is actually little fighting in Pleiku. There is a lot of fighting a few miles out of the town and this is why so many of our troops are stationed around Pleiku.

At 5 o'clock that afternoon, I was taken to the airfield, as a plane was supposed to pick me up at 5:30 and take me back to Saigon. For some reason, the plane never arrived, so at 7 o'clock I was taken back to the American Army compound on the outskirts of Pleiku. Since we had called ahead, they saved me a plate of food at the officers' mess. After the meal I visited with some of the men stationed there. I was impressed by the warm feeling of these soldiers for the local population and their belief that we cannot and must not let the communists enslave these people. Since they all had seen the results of the Viet Cong terror and torture on a helpless people they were willing to put up with the discomforts and danger in their effort to help these people stay free.

That night four of us slept in a small room just big enough for two double beds. Because I was a guest I got one of the lower bunks. Each bunk had good mosquito netting, a must in the highlands.

The next morning, after going on rounds of the hospital, I went to the airfield and soon caught a ride in an Air Force C-130. This is a huge, four engine cargo plane that carries tons of cargo to keep our troops supplied. I finally got home about 12:30 p.m., and a toothbrush, razor, bath and clean clothes were never so welcomed.

This, my second trip to the highlands, was interesting and permitted me to gain a better insight into the many problems here to meet and know more of the wonderful people that inhabit this land, and to admire even more our own countrymen who sacrifice so much, and endure such hardships and danger in the effort to keep strangers healthy and free. A deep bow to all of them who are doing so much.

MALCOM E. PHELPS, M.D.
Director, A.M.A., Volunteer Physicians for Vietnam

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The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide	195 mg.
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Phenobarbital, Caution: May be habit forming	21 mg.
Ephedrine HCl	16 mg.

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Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

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MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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(diazepam)

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Before prescribing, please consult complete product information, a summary of which follows:
Contraindications: Infants, patients with history of convulsive disorders or glaucoma.
Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.
Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.
Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, hallucinations); changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.
Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.
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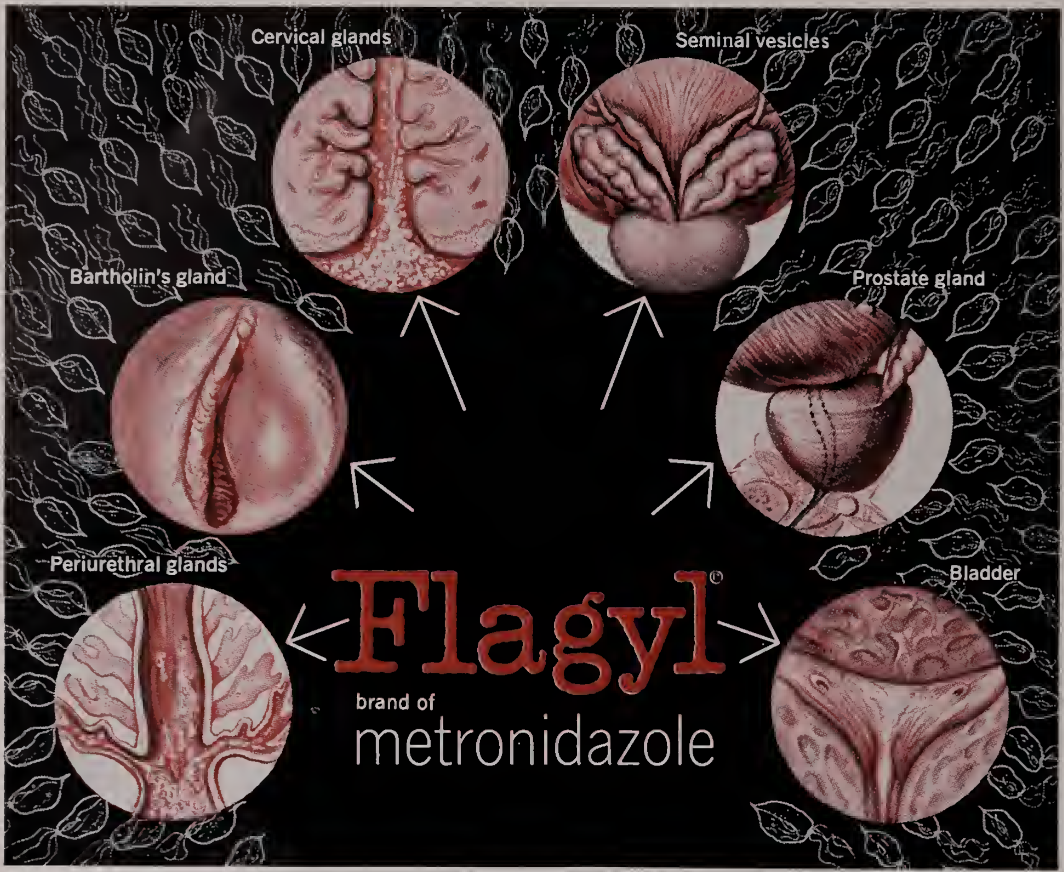

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Side Effects — Infrequent and minor side effects include nausea, metallic taste, furry tongue and headache. Other effects, all reported in an incidence of less than 1 per cent, are diarrhea, dizziness, vaginal dryness and burning, dry mouth, rash, urticaria, gastritis, drowsiness, insomnia, pruritus, sore tongue, darkened urine, anorexia, vomiting, epigastric distress, dysuria, depression, vertigo, incoordination, ataxia, abdominal cramping, constipation, stomatitis, numbness of an extremity, joint pains, confusion, irritability, weakness, flushing, cystitis, pelvic pressure, dyspareunia, fever, polyuria, incontinence, decreased libido, nasal congestion, proctitis and pyuria. Elimination of trichomonads may aggravate candidiasis.

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SEARLE *Research in the Service of Medicine*

Discoveries on Patient Care

Atlantic City, superbly equipped for meetings—but in the opinion of one not interested in salt water taffy or auctions of dubious art, not much else—is the scene once a year of a group of meetings referred to unofficially as The Spring Meetings. They are held in late April or early May. Sponsoring organizations are The American Federation for Clinical Research, The American Society for Clinical Investigation, and the Association of American Physicians. The meetings are held consecutively, in the same hotel, and the more than 3,000 registrants usually attend all three meetings. They are of interest primarily to medical school personnel.

These are important meetings. They provide a forum for presentation of research reports, with ample time for attack or comment by critics and questioners. They provide opportunity for those engaged in teaching and research to meet and exchange thought. A number of eminent foreign investigators usually attend. But, since most of the reports are on basic research, they are of no great interest to physicians in practice.

One subspecialty program is an exception. An evening session is devoted to patient care. It is a relatively new addition and attendance has been growing. What makes this small part of the multiple meeting schedule so interesting is the fact that the papers about patient care, on the whole excellent contributions, are submitted by those who know and understand patient care only from a hospital—medical school background. It is almost as though they have been surprised to discover that patients sometimes have an existence outside of the hospital walls. Or that attitudes might have something to do with response to treatment.

One of the very interesting reports this year was on a study of what happens to the patient after he has been discharged from the hospital.

After a study of more than three hundred patients, including review of charts, interviews with ward personnel, and home visits at two weeks after discharge, there were several significant conclusions. Contacts on the wards seemed to have been mostly on matters of administrative detail rather than patient care. There was no established pattern of review of the patient's needs, and no pattern for giving advice at discharge. The staff knew nothing of the world to which the patient was being returned. As a result, instructions given the patient as he left the hospital were frequently not pertinent, or were impractical, and occasionally were ludicrous.

Interviews with ward staff revealed that they did not view the discharge process as significant or important. In the home visits it was discovered that 50 per cent of the patients did not return to a situation satisfactory for continued progress.

The hospital studied was not named but it was described as a first class, teaching hospital.

The discovery that patient attitudes might be important came from observation of effects on patients when transferred from a coronary care unit. Tranfer was ordered upon indication that the patient had made satisfactory progress as determined scientifically. In the highly departmentalized hospital, and without a personally interested physician, this meant abrupt loss of the physician who had been responsible during the critical phase.

It was discovered that this had been creating a significant, but previously unrecognized, emotional impact. There were a number of recurrences and complications. In the patient's view, the transfer had been accomplished abruptly and without his participation in the discussion. He went from a private room to a ward. He lost the support of interested staff and had to get acquainted with staff members new to him. He was subjected to a sharp change in regimen.

Change was adopted. Findings were explained to the patient and the contemplated transfer was discussed before it was ordered. Efforts were made to coordinate care and the patient's feelings were taken into consideration. The physician from the coronary care unit began making follow-up visits to the patient after he had been transferred to the ward. The incidence of complications was reduced.

Oddly enough, few in the audience seemed to realize that these latest scientific discoveries were just ideas that had been discovered on the island of Cos, more than two thousand years ago. ■

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Human Renal Homotransplantation

Part 1, Biologic Concepts

DIETER KIRCHHEIM, M.D. / RUSSELL K. LAWSON, M.D. / LELAND R. ELLIS, M.D.
CLARENCE V. HODGES, M.D., Portland, Oregon

An immunologic barrier prevents acceptance of homografts unless immunosuppressive agents are used. In one mechanism, plasma cells secrete antibodies that may be measured by serologic tests. Another mechanism involves activities of lymphocytes and does not produce measurable changes in serum, hence cannot be deteced by agglutination or precipitation. Burnet's clonal selection theory has been widely accepted to explain the developments of graft-destroying lymphocytes. Further progress in transplantation will depend on development of methods to control immunologic rejection without interfering with immunologic defense of the host.

Following the recent paper in this journal by Haviland, on the work and results of the Seattle Artificial Kidney Center,[1] it seems appropriate to offer a brief review of advances and problems in the field of human renal homotransplantation. The first human renal transplantation at this institution was done in 1959, between identical twins.[2] Both donor and recipient are alive, enjoy good health, and lead normal lives. This contrasts sharply with the disappointing results obtained between 1960 and 1962 in cases using donors that were not twins.

In such cases, the genetically determined, immunologic barrier resulted in rejection of the foreign graft. For this reason, a moratorium on clinical homotransplantation was decided upon in 1963, and our efforts were concentrated and confined to the laboratory until March, 1966. Since the introduction of more effective immunosuppressive drugs (azathioprine, actinomycin C, prednisone) in the early sixties, greatly improved results have been achieved by several transplant centers.[3-6] They have reported one year survival and transplant success figures of 50-60 per cent for transplants from closely related donors (parent, sibling) and of over 35 per cent for transplants from unrelated or cadaver donors. Recipient survival figures alone (not considering the function of the transplant) are even higher and some patients have successfully received transplant of a second kidney. An increasing number of transplant teams are reporting their findings and results to the Registry on Human Renal Transplants in Washington, D.C. Over 1,000 human renal transplants had been reported by spring of 1966.

After extensive work with dogs in our laboratories, we felt justified in resuming clinical renal transplantation, in carefully selected patients, in March, 1966. At present, most investigators feel that human renal homotransplantation is still in an investigational stage and should be done only at centers where research facilities are available. Here, the clinical experience can be carefully evaluated and new techniques developed and applied to the patient.

In this and the following papers, we shall attempt to give a general review of the pertinent aspects of human renal homotransplantation as it stands today. We hope this will be of help to physicians who see patients with irreversible renal failure or take care of patients after renal transplanation.

historical development

The surgical technique of renal transplantation was developed and successfully carried out in animals in the first decade of this century.[7,8] The investigators noticed that grafts within the same organism (autografts) functioned for long periods, while grafts from a donor within the same species (homo- or allografts) or from another species (hetero- or xenografts) were rejected after a short interval of function. In 1927, Bauer transplanted skin successfully from an identical twin to his mate who suffered from syndactily.[9] In the forties and fifties, Medawar and his associates discovered, by systematic experiments using inbred strains of mice, the im-

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This is the first in a series of four articles on renal transplantation. Part 2 will be published in the July issue.

munologic principles underlying homo- or heterograft rejection.[10, 11] They defined the principles of latency in rejection of primary or first set homografts and the accelerated rejection (second set reaction) when a second homograft from the same donor was applied after rejection of a primary graft. In 1958, Medawar shared with Burnet the Nobel Prize for fundamental work on the biology of transplantation.[12, 13] Burnet evolved the theory of clonal selection, which describes the maturation and mode of action of certain cells of the reticulo-endothelial system of the host ("lymphoid cells" and "immunologically competent cells") and their role in the rejection of transplants "foreign to self."[14]

Tremendous increase in investigative work in the biology of tissue transplantation has taken place within the last 20 years and it has become difficult for the clinician in this field to keep abreast of the literature. In the fifties, Murray's group and others published the results of successful renal transplants between identical twins.[1, 15-17] Several groups attempted renal homotransplantation between 1952 and 1962 without immunosuppressive treatment of the recipient[18] or with sublethal roentgen treatment of the recipient.[19-21] As mentioned above, only rare cases survived for appreciable times.

In 1958, Schwartz and Dameshek published their work on immuno-suppression of the response to foreign serum albumin injected into rabbits using 6-mercaptopurine.[22] Calne and Murray applied this work to their experimental dog kidney transplant model with encouraging results. Further work by these and other investigators showed that an analogue of 6-mercaptopurine, azathiopurine was less toxic and more effective as an immunosuppressive agent.[23] In addition, actinomycin-C was found to be a helpful adjunct to immunosuppressive treatment.[24] Goodwin found prednisone of great value in the treatment of rejection crises.[25] The value of thymectomy, splenectomy, irradiation of the graft and several other types of treatment has been explored recently and will be discussed later.

basic immunological concepts and histology of the homograft reaction

Higher vertebrates, including man, are equipped with a reticuloendothelial system (RES) which enables them to defend and maintain their individual and species specificity against substances (antigens) which are foreign to their "self" composition (immunological homeostasis). This mechanism is of high value for health and survival when it serves the organism in defense against pathogenic micro-organisms. It provides heightened resistance, or immunity. In rare instances, however, it may be erroneously directed against "self" substances and cause an autoimmune disease, such as thyroiditis where antibodies are formed against the thyroglobulin of the organism's own thyroid gland. Until recently, this important mechanism has thwarted all efforts to transplant tissues or organs between individuals except identical twins.

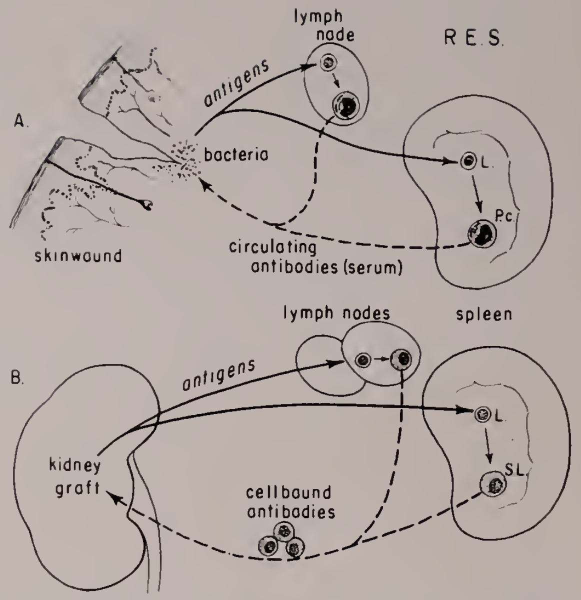

Figure 1. A, humural immunological reaction. B, Cellular immunological reaction. L, lymphocytes. Pc, plasma cells. S L, sensitized lymphocytes, R E S, reticulo-endothelial-system.

Figure 1 illustrates two types of immunologic reactions. Figure 1A represents the common humoral response against invading microorganisms. The bacterial antigens stimulate certain groups of lymphocytes ("clones," see below) within the RES (spleen, lymphnodes, bone marrow) to transform into plasma cells. It has been shown that plasma cells produce and secrete antibodies into the general circulation, where antibody titers can be measured by various serologic tests (agglutination, precipitation). Serum of such immunized hosts can be transferred to unsensitized individuals to afford a temporary state of immunity (passive immunization).

Figure 1B shows the difference in the efferent arc of the cellular type of immunologic reac-

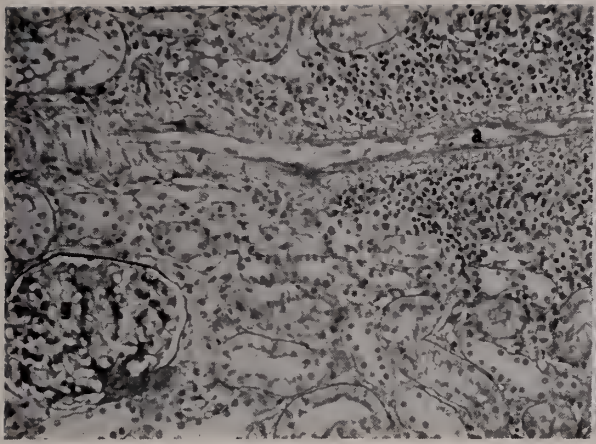

Fig. 2

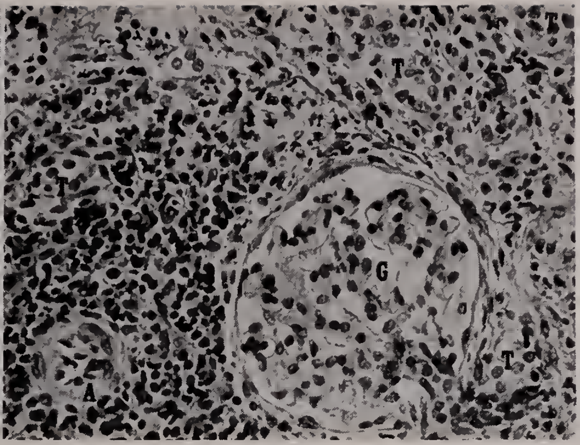

Fig. 3

Figure 2, P.A.S. stain of biopsy of untreated renal homograft on fourth day after transplantation. a, interlobular artery surrounded by mononuclear (lymphoid) cell infiltrate, g, glomerulus.

Figure 3. Same as Figure 2 on eighth day after transplantation. T, renal tubules.

tion, which takes place in foreign tissue grafting and other allergic reactions such as the tuberculin reaction. Antigenic stimulation by the foreign tissue components results in transformation of certain groups (clones) of lymphocytes into larger sensitized lymphoid cells. In contrast to the above described humoral reaction, these cells *enter* the circulation, attach to blood vessels within the graft and infiltrate the interstitial space of the transplanted kidney. Figure 2 shows an untreated canine renal homograft four days after transplantation. Focal accumulations of host lymphoid cells can be seen around small arteries, arterioles and in peritubular spaces. Progressive infiltration and high mitotic activity of these lymphoid cells explains the diffuse and dense interstitial mononuclear cell infiltration in Figure 3, which represents a biopsy from the same graft on the eighth day after transplantation. This, together with vascular obliterative changes, results in necrosis (rejection) of the graft usually within 9-12 days.

Most investigators have been unable to demonstrate circulating antibodies in the recipient against the homograft which explains the failure to transfer homograft sensitivity using serum from the host. On the other hand, an injection of lymphocytes from a sensitized host to an unsensitized recipient will result in transfer of homograft sensitivity. It is obvious from these findings that lymphocytes play a decisive role in the recognition of an antigenic substance and as mediators in the destruction of the foreign grafts.

How do the immunologically competent lymphocytes within the RES recognize a substance as foreign to self? For several decades this was explained by the "instructive theory." According to its proponents, antigens act as templates and *induce* antibody formation in lymphocytes and plasma cells. Within the last decade, Burnet's "clonal selection theory" has gained acceptance by many investigators. According to Burnet, an antigen *selects* the complementary antibody-producing lymphocytes (clones). Figure 4 summarizes the essential steps of Burnet's theory: During fetal development, mesenchymal undifferentiated precursors multiply within the thymus gland. (See also Burnet, Pathology of the Thymus, this journal, August and September, 1964).

Random mutations occur during multiplication in those genes of the chromosomes that will control antibody production. At the end of Step I in Figure 4, eight different genes are illustrated by differently shaped black symbols. (In reality, the number of immunologically competent cells differing at the antibody producing gene is much larger.) Before birth, those clones that make antibodies complementary to antigens within the own organism (dotted antigen symbols) are neutralized or destroyed (B, D, and E). At birth, by

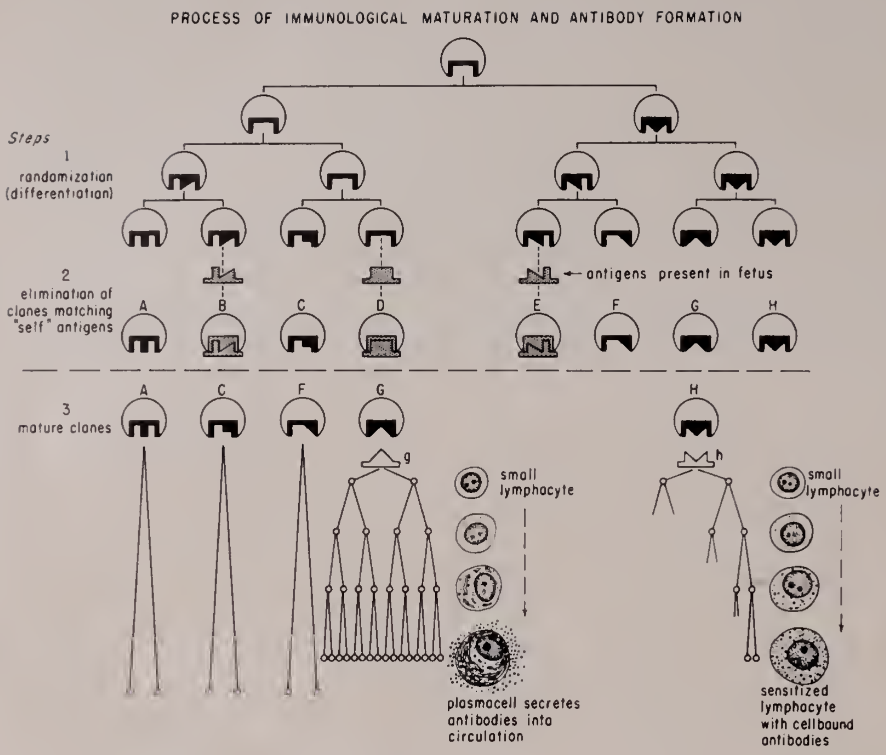
PROCESS OF IMMUNOLOGICAL MATURATION AND ANTIBODY FORMATION
Steps
1
randomization (differentiation)
2
elimination of clones matching "self" antigens
antigens present in fetus
A
B
C
D
E
F
G
H
3
mature clones
A
C
F
G
H
g
h
small lymphocyte
plasmocell secretes antibodies into circulation
small lymphocyte
sensitized lymphocyte with cellbound antibodies

Figure 4. Process of development of immunological competent cells and antibody formation.

further multiplication and distribution, each surviving clone of lymphocytes can be found in all regions of the RES (clones A,C,F,G, and H in Figure 4). When an antigen g or h makes contact with the complementary lymphocyte clone G or H, multiplication of this clone and formation of plasma cells or sensitized lymphocytes occur. It is not known why some antigenic stimuli result in plasma cell formation secreting circulating antibodies (g and G, Figure 4) while others produce sensitized lymphocytes with cellbound antibodies (h and H in Figure 4). Medawar gave support to Burnet's theory experimentally when he demonstrated acquired tolerance to foreign antigens introduced prior to maturation of immunological competence in mice.

The feasibility of routine clinical application of organ transplantation in the future will depend upon further progress in the research laboratory in evolving means to creat "immunologic tolerance" against the graft without crippling the immunologic defenses of the host. ■

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chemical nomenclature

generic	trade
azathioprine	Imuran
prednisone	Deltasone Deltra Meticorten Paracort
6-mercaptopurine	Purinethol

abstracto

Una barrera inmunilógica impide la aceptación de homotransplantes a menos que se use agentes inmunosupresivos. En un mecanismo, los plasmacitos secretan anticuerpos que se pueden determinar por pruebas serológicas. Otro mecanismo comprende actividades de los linfocitos y no produce cambios demonstrables en el suero, por tanto no se pueden demonstrar por la aglutinación o la precipitación. La teoria de la seleccion clonal de Burnet ha tenido aceptación amplia para explicar los desarrollos de los linfocitos destructores de transplantes. Mayor progreso en transplantes dependerá en el descubrimiento de métodos para controlar rechazos inmunológicos sin interferir con las defensas inmunológicas del recipiente.

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The price system

Almost without exception, appeals to "social responsibility" arise because of an unwillingness to let the price system work. They constitute an attempt to replace the price system by some alternative device. But no one has yet invented or discovered a device that can do the job which the price system does: of coordinating the activities of countless millions of people impersonally and without any need for central control; of providing a mechanism that simultaneously transmits information about changing demand and availabilities, gives economic agents an incentive to act appropriately in response to the information transmitted, and adjusts consumption to available supplies in the short run of rationing the supplies while simultaneously providing for adjusting production to consumption in the long run.

Prof. Milton Friedman quoted by Lawrence Fertig, in The Freeman, November, 1966

Short Term Group Psychotherapy With Obese Women

A Pilot Project

HAYDEN L. MEES, Ph.D., Seattle, Washington / **CAROLIN S. KEUTZER, M.A.,** Eugene, Oregon

Many obese adults and adolescents do not benefit from diet programs because they simply do not eat within the acceptable limits for weight control. When this occurs, the typical behavior patterns and motivations of the patient may be explored with the goal of psychotherapeutic intervention.

A number of adolescent and adult women who were having particular difficulty following an out-patient plan were referred for a pilot study of the effectiveness of group psychotherapy for changing their behavior. The adolescent girls and the women attended different groups, with somewhat different emphasis on technique. Results indicate that the women responded more favorably than the adolescents, who were much more guarded and sensitive. The degree of active therapeutic participation was directly related to change in behavior patterns and weight loss.

Many adolescent and adult obese women do not benefit from diet programs simply because they do not follow them within the acceptable limits for weight control. These women do not seem to be willing or able to assume even minimal responsibility for their own eating habits. To the physician, dietician, or casual observer, questions occur as to the dieter's motivation to lose weight, about her role at home, school or work, about her self-concept, about whatever positive values or secondary gains accrue from being overweight, and about her general relationships with others. One method of exploring such questions, while at the same time attempting to change some of the patient's psychological characteristics, involves psychotherapeutic intervention. A group method is considerd both effective and efficient when dealing with numbers of persons having similar psychological problems. The purpose of this project, then, was to explore the feasibility of using a group psychotherapy technique to identify and alter significant psychological characteristics of unsuccessful dieters.

Plan. Briefly, this project included seeing, on a weekly basis, diet patients who were having special difficulty following an out-patient diet plan.* A male and a female psychotherapist met with the patients for about two hours per session, ostensibly to discuss either personal problems or problems with the diet. The program lasted ten sessions. Patients were charged fifty cents or one dollar per meeting, depending on ability to pay.

Technique. Because the procedure was somewhat different in the two groups, the adolescent girls are considered separately from the group of adult women.

adolescents

The ten girls in the adolescent group ranged in age from 14 to 20, with a consequent diversity of interests and social skills. Perhaps as a result of this heterogenity, they typically were sensitve, anxious, and hesitant about discussing personal problems in a group situation. They preferred to listen or discuss impersonal and safe subjects. Initially an atmosphere of unstructured openness and honesty was encouraged so that the girls could become more aware of their own feelings, the impressions they made on others in the group, and the roles they customarily assumed in social interactions. However, it was soon found that these adolescents were unable to tolerate the anxiety engendered by the lack of structure and the loss of habitual social facades, and a high dropout rate at the beginning of the sessions might reasonably be attributed to this. More structure was thus introduced but this procedure risked encouraging a classroom atmosphere with a pupil-authority relationship. A satisfactory balance was never attained in this adolescent group.

Within this modified open discussion framework, the girls discussed their diets, their reasons for over-eating, their social roles and roles in family life, and their attitudes and ideas about boys, school popularity, dating, marriage, careers, etc. In addition to this generally free interaction within the group, the girls were asked to discuss and bring in lists of the reasons why being overweight was undesirable to them and why reducing to their correct weight would be desirable.

---

*The patients in this project were under the dietary care of Thomas A. Kerns, M.D., and Irena S. Gallivan, dietitian.

Some techniques were offered to help them follow their prescribed diets. Essentially these techniques involved associating excessive eating with the reasons they disliked being overweight and associating not overeating with their reasons for wanting to be the correct weight. (This is a simplified description of a method of self-control developed by Lloyd Homme.[1])

adults

The 14 adult women in the second group were much more out-going, enthusiastic and willing to participate in the group interactions. Although there was a strong tendency to avoid significant areas of discussion, the general nature of the meetings was more that of a conventional confrontation therapy group—a concerted rejection by the members of the group of the excuses, rationalizations, and alibis offered to explain all types of behavior, including over-eating; a refusal on the part of others to accept certain habitual roles (such as martyr) as appropriate; the analysis of behavior in terms of psychological motivations beneath social facades; a directing of group discussion away from the impersonal to the personal, from the general to the specific, from the bland to the emotional, from the distant to the immediate and from the abstract to the concrete; and in general, a more honest and direct approach to personal and interpersonal problems.

The therapists focussed at first on the patients' motivations (or lack of them) to reduce, on their eating habits, the relationship of eating and being obese to family and marital problems, and the ways in which they interacted with their families and other significant people. These interactions were discussed in terms of the games they played** with others, and were analyzed when their inevitable counterparts were exhibited in the group interactions.

For homework, the women were to pay careful attention to their eating habits and to write down when it was that they ate inappropriately. Another assignment, which was really only the crystallization of an ongoing process during the course of therapy, was to write down what it was they wanted or expected from life, their general goals, and then to list the reasons they had thus far been unable to attain them. It was hoped that assignments such as these would force closer self-scrutiny and lead to new insights into themselves. The ultimate goal, of course, was to arrange conditions so that it became impossible for the women to continue to avoid their problems and to refuse to accept responsibility for their own lives.

results

Adolescents. The adolescent girls were generally unwilling or unable to come to meetings regularly, and there was an inverse relationship between the degree of obesity and their attendance at meetings. In terms of weight reduction, there is no direct evidence that the group meetings were helpful to these girls. However, for the few girls who were able to discuss significant personal problems in the group, there seemed to be some positive personality developments; e.g., a lessening of emotional constriction, a broader outlook on life, and a willingness to face problems directly. The majority of the girls either did not attend the meetings at all or remained withdrawn and uncommunicative when they did come.

Adults. The adult women seemed to benefit more from the meetings. All of them lost some weight, with four of them reaching or nearly reaching their ideal weights. Two were considered definite failures in that they had not lost weight or faced their problems directly by the end of the sessions. The others had begun to discuss and consider the problems originally posed as contributing to their weight problems.

It is significant that the women who were most successful in losing weight were the ones who made, or began to make, positive adjustments in family life. They tended to stop using food, eating, and obesity as substitutes for self-expression, fulfillment of thwarted desires, or expression of independence and rebellion. They gave up the role of martyr which had previously given them the excuse to eat in order to compensate for the abuse they had elicited and received.

Those who were less successful were willing to look at their problems, but would take no responsible action (including sticking to the diet) to remedy the situation. The women who were considered failures would neither look at their

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**With acknowledgement to the work of Eric Berne, M.D.

problems nor assume responsibility for themselves.

recommendations

Since this was not an evaluation of the diet or the concept of dieting, it is assumed that proper dieting would lead to weight control if the obese individual would simply follow instructions. Many patients try to appease themselves somehow by pretending to diet (by buying diet food, etc.) but then actually eating extra food. Sometimes this occurs as a reaction to frustrations of everyday life, sometimes extra eating becomes a way of life. Frequently, the patient is caught in the vicious cycle of feeling so guilty and worthless because she is obese that she eats to console herself. Being overweight is self-maintaining also when it prevents the person from participating in life in ways that would preclude or make unnecessary excessive self-indulgence. It is behavior patterns such as these that call for a psychological reorientation, perhaps through group psychotherapy, of the individual so involved. ■

Seattle University (98122)
(Dr. Mees)

abstracto

Muchos adolescentes y adultos obesos no se benefician con los programas dietéticos por la sencilla razón de que ellos no comen dentro de los límites aceptables para el control de peso. Cuando esto sucede, se debe explorar el comportamiento típico y estímulos de los pacientes hacia un fin de intervención psicoterapéutica.

Un número de mujeres adolescentes y adultas que estaban teniendo dificultades siguiendo un plan dietético como pacientes libres, fueron referidas para un estudio piloto de la efectividad de la psicoterapia de grupo para cambiar su comportamiento. Las adolescentes y las adultas atendieron grupos diferentes, con diferente énfasis en técnica. Los Resultados indican que las mujeres adultas respondieron mas favorablemente que las adolescentes, quienes estaban mucho mas recluidas y sensitivas. El grado de participación terapéutica activa estaba relacionada directamente al cambio en proceder y perdida de peso.

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Editor's note: After first reading of the preceding paper a letter was addressed to Dr. Mees, asking about the rather inconclusive nature of the report, whether acceptance could be predicted by tests, and whether a longer course might have given better results. This is his reply:

Editor, NORTHWEST MEDICINE:

Thank you for your response to my manuscript about the obesity study. I can give you my thinking on some of the problems you mention in your letter.

Unfortunately, the article is rather inconclusive. Studies of this sort usually are. Being aware of this fact, I asked two or three associates whether they felt it would be of any particular value to physicians and if it should be submitted for publication. They thought it should be if for no other reason than to give encouragement to physicians to try to deal with these very difficult problems, and perhaps to try new methods with patients who do not respond well to their more traditional techniques. I will add that my associates may have been more kindly disposed than accurate in their evaluation. Your reviewing committee will be unbiased on this point, I am sure.

Before and during the series of therapy sessions, psychological tests were given these patients. Test analysis revealed no common patterns and no characteristics that differentiated successes from failures or that typified the groups in any way. However, all of the patients involved had been identified as special problems or failures in a diet program before they came to the group. In this respect they were unlike the hundreds of patients who had been treated successfully without special psychological help.

Yes, I think there are signs that may help your readers decide who could benefit from a program incorporating psychological help. At this stage with our incomplete knowledge about people, it is not possible to predict very well who will benefit from which methods in advance. When a physician prescribes a course of treatment, but the patient does not improve his condition because he does not follow the prescription, I think the physician may try a number of alternative courses of action. He may try different techniques in his armamentarium, or he may become discouraged and lose interest in the case. However, this is the point at which I would suggest psychological consultation to look into the factors preventing the patient from following instructions.

Finally, in answer to your question about duration of psychological treatment: I would be inclined to say that longer treatment of the same type would probably not be of much value. I would try a different type of psychological intervention for those who did not improve. Because of time limitations of my own, I was not able to carry out research on alternative methods for these patients. I am attacking the same types of problems in a different but related area: smoking. Perhaps here I shall find more conclusive answers to your questions.

Sincerely,
HAYDEN L. MEES, PH.D.
Associate Professor of Psychology

Leiomyoma of the Esophagus

LAWRENCE B. KIRILUK, M.D., Seattle, Washington

Leiomyomas of the esophagus, once considered to be rare, are being encountered more frequently. The most common presenting symptom is mild, slowly progressive dysphagia. Pain, if present, is due to ulceration produced by the tumor. Diagnosis requires teamwork by the clinician, radiologist and endoscopist. Most tumors can be enucleated without damage to the mucosa but some require excision of mucosa, followed by repair. Resection and anastomosis are occasionally necessary. Esophago-gastric resection is the most difficult procedure, technically. Results of the surgical treatment are usually good.

Leiomyomas are the most common benign tumors that involve the esophagus. These lesions were once considered rare but within the past few years they have been encountered more frequently. Sauerbruch is generally given credit for removing the first tumor of this type in 1932.[1] By 1949, only 16 surgical cases had been recorded, and in 1956, the reported overall total was 110[2]. Through 1959, 166 patients with esophageal leiomyomas had been operated upon for their disease.[3] In addition to this substantial number, it is certain that many patients have been operated on for this tumor, but not recorded in the literature. A review of the statistics at the Swedish Hospital, Seattle, for the years from 1940 through the present, revealed only 11 cases. Four of these were found at the time of postmortem examination. Seven had been subjected to surgery. Of these seven, two were found unexpectedly at the time of surgery for another condition. These were found at the cardioesophageal juncture. Five had a preoperative diagnosis of leiomyoma or a mass compromising the lumen of the esophagus. During this time, there were approximately 370,000 admissions to this hospital. The rarity with which this lesion occurs is also illustrated by Shaffer and Kittel, who found 11 leiomyomas of the esophagus in 6,001 autopsies.[4]

The purpose of this paper is to present an interesting case to enliven awareness of the existence of this lesion, and to discuss the surgical approach and meticulous care which should be employed in these cases which are benign and should have a low morbidity and mortality.

CASE REPORT

A 43-year-old man was admitted to Swedish Hospital on March 14, 1966, complaining of severe, stabbing, substernal pain penetrating to the back. The pain had become severe two days prior to admission; however, he had noted pain in his chest with cough and hoarseness about three weeks prior to admission. A course of antibiotics at that time had cleared this episode. Careful questioning revealed that he had had some mild, nondescript dysphagia for six months, but that the moderate dysphagia developed over the preceding two weeks. The past history was noncontributory.

A chest x-ray taken on March 12, 1966, revealed a mass at the cardiac level, Figure 1. A barium swallow revealed the obstructing lesion, Figure 2.

Esophagoscopy was done on March 15, 1966. A lesion was encountered in the middle third of the esophagus. The lumen was displaced toward the right. Debris and food were encountered and a friable, edematous, bloody mucosa was noted. There was a large ulcer in the contralateral wall. Because the mucosa was jagged, torn, and ulcerated over the lesion, a biopsy was done. This revealed a chronic and acute esophagitis.

A right thoracotomy was done, March 19, 1966. A mass measuring approximately four inches in diameter was found to lie directly beneath the arch, posterior to the heart, and more to the left of the mid

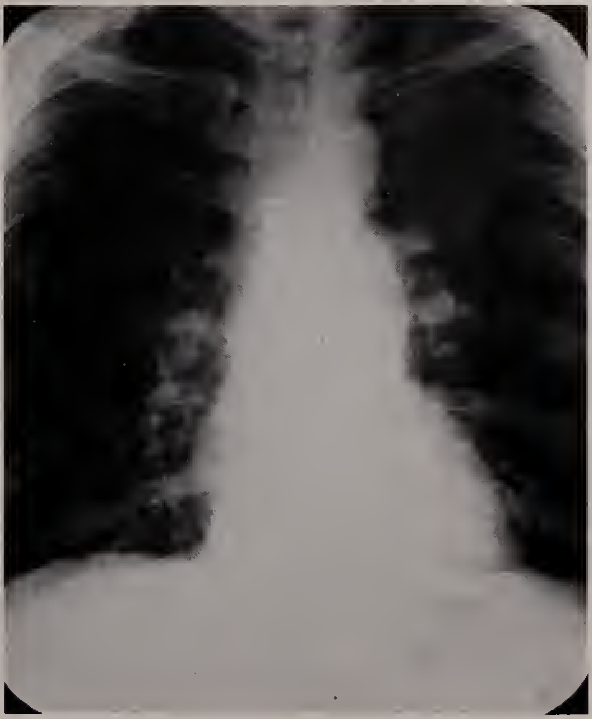

Fig. 1. Preoperative x-ray reveals a mediastinal mass.

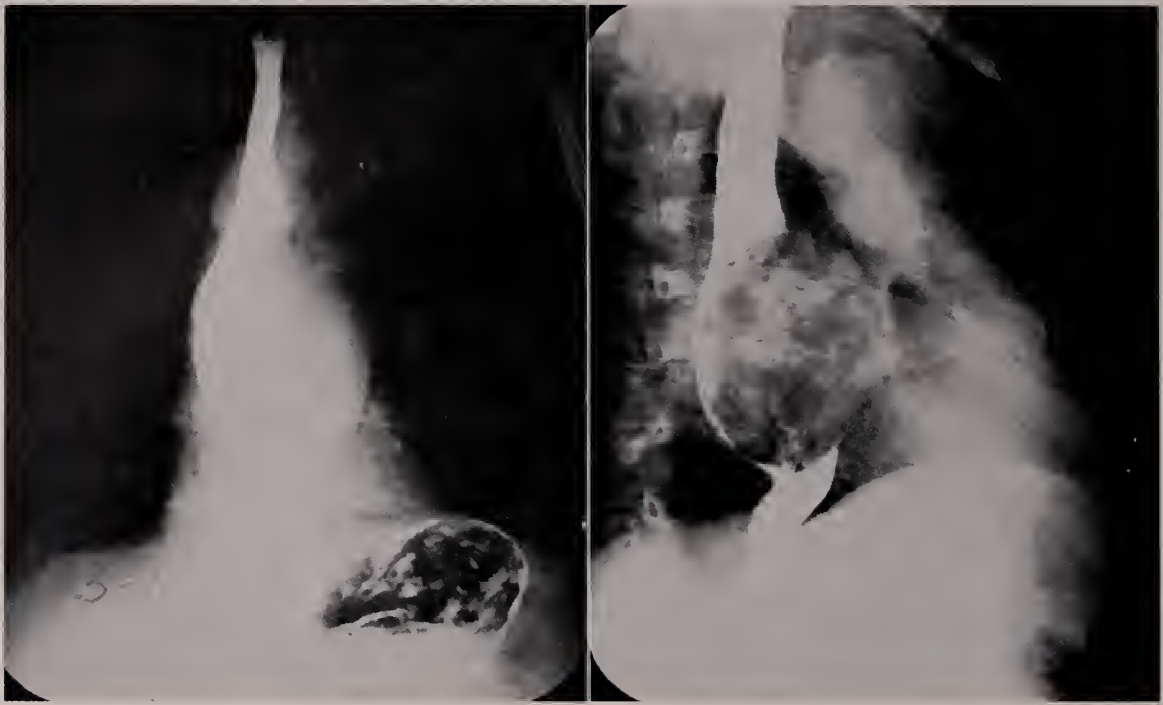

Fig. 2. Preoperative P A and lateral after barium swallow.

line. The entire segment of the esophagus was mobilized and displaced into the right chest, Figure 3. The azygos vein was divided. The tumor was intramural, but had produced a large mucosal defect approximately two inches in length. This was the probable cause of the pain. Following enucleation of the tumor from the wall, the mucosal defect was closed with 3-0 chromic catgut supported by sutures of 4-0 silk. One million units of penicillin were deposited in the mediastinal area and two cigarette drains were placed, one to the left and one to the right of the esophagus and brought out inferiorly and anteriorly to emerge retroperitioneally and from under the xiphoid as is illustrated in Figure 4. The pleura was then closed and the chest drained with a large tube connected to three-bottle suction. The patient had an uneventful recovery, and was discharged on March 31, 1966. He has remained completely asymptomatic since. An x-ray taken on March 28, before discharge, revealed an essentially normal esophagus, Figure 4.

incidence and symptoms

Leiomyomas account for about 75 per cent of the benign esophageal tumors and 5 to 10 per cent of the benign smooth muscle tumors of the alimentary tract.

Two per cent are found in the cervical esophagus, 9 per cent in the upper third, 35 per cent in the middle third, and 54 per cent in the lower third of the esophagus.[5] In surgical cases, however, the middle and lower thirds are in about equal ratio.

None have been found in patients under the age of 10. In surgical cases, the average age is in the 40's. In the post-mortem cases, the average age is in the 60's. The lesion occurs twice as frequently in the male as in the female. There has been only one case reported in a Negro.[5]

No definite pathognomonic symptoms or combination of symptoms exists. The most common presentation is dysphagia, usually mild, slowly progressive, periodic, and worst when solid food is eaten hurriedly. The digestive symptoms are vague and consist of nausea, regurgitation, and postprandial epigastric discomfort. Pain is usually infrequent and usually substernal or epigastric. Salivation may be excessive. Cough or dyspnea have been ascribed as being caused by leiomyoma. Ulceration may lead to melena or hematemesis. About 85 per cent of the operative cases will have one or a combination of symptoms. In the cases in which leiomyomata are found at postmortem, only 9 per cent will have complained of symptoms attributable to leiomyoma.

diagnosis

Preoperative diagnosis of leiomyoma of the esophagus requires the combined resources of the clinician, radiologist, and esophagoscopist. The services of a surgeon and a pathologist are required to confirm this diagnosis. The reported preoperative correct diagnosis average is about 30 per cent.[3] The clinician may gain a clue as to the benignity of an esophageal lesion by the ambiguity of the signs or symptoms for a prolonged period of time.

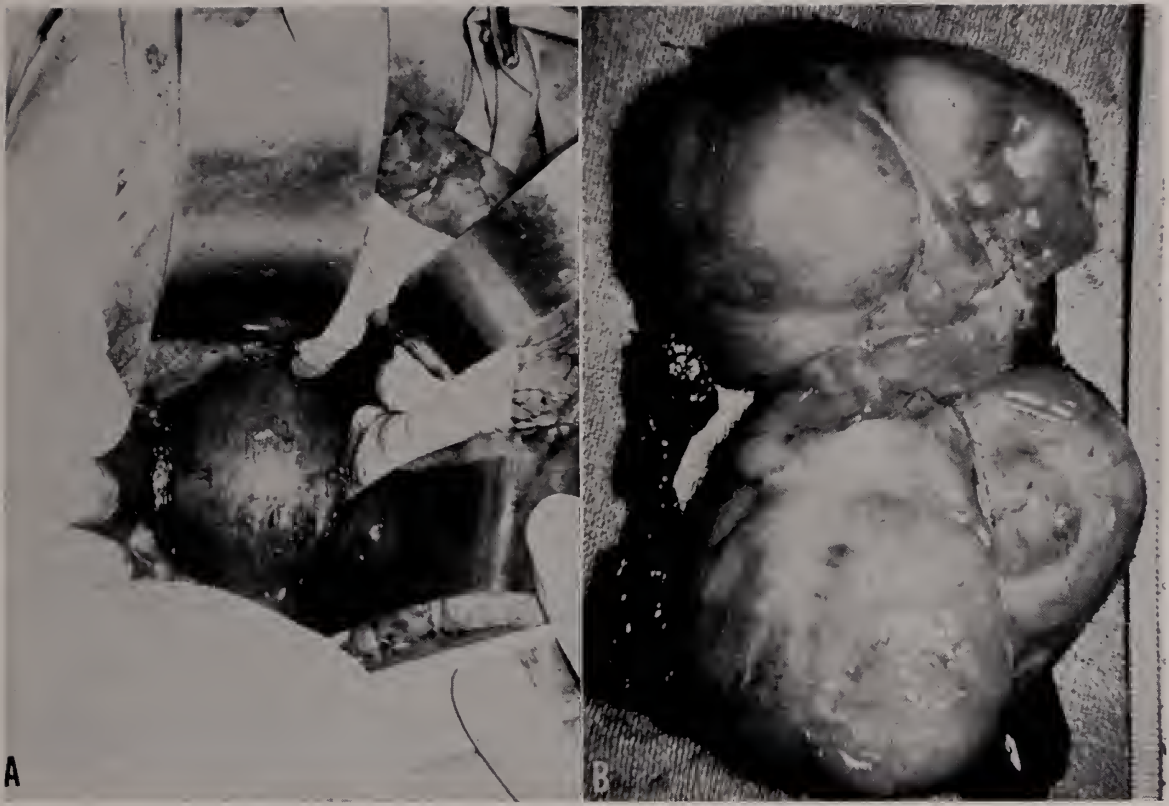

Fig. 3. A. Distortion of esophagael wall as observed when first exposed. B. The tumor was intramural but could be removed by enucleation. A small rent in the mucosa was repaired.

Radiologic examination provides the principal method of preoperative diagnosis in this tumor. A routine study of the chest will rarely suggest its presence. On barium swallow, the typical roentgen finding is a segmental, intramural, filling defect in the esophagus with intact overlying mucosa. The defect may be half-moon, lacunar, or crescent-shaped. The lumen of the esophagus is usually narrow at the site of the lesion, but the barium passes readily. Occasionally, it splits producing the so-called fork-stream appearance.

In the esophagus there is an intruding mass over which there is normal mucous membrane. The esophagoscope can usually be passed beyond the tumor. A specimen should not be removed from the mucous membrane for biopsy. A deep mucosal biopsy could, at least theoretically, be responsible for esophageal leakage.

Carcinoma, hiatal hernia, diverticulum, and esophagitis are the most common alternatives to be considered in the differential diagnosis. Mediastinal tumors or aneurysms may be dismissed because they do not move with the esophagus during swallowing. Leiomyomas may be differentiated from carcinomas by the smooth intact mucosa on x-ray and endoscopy. Dysphagia and weight loss are frequent in carcinoma.

pathology

The majority of leiomyomas of the esophagus are intramural. Some of these are large and may become C shaped or angular. The lesion may be multiple. The leiomyoma itself is firm in consistency, usually smoothly rounded (unless large), and grayish-white on section. They are relatively avascular and a capsule, even when present, is not well defined. They may occasionally calcify, but rarely, if ever, undergo cystic degeneration and very few have become ulcerated on the surface. There is no correlation between tumor size and duration of symptoms. The rare possibility of malignant transformation of benign leiomyomas into leiomyosarcomas cannot be overlooked. In the literature, there has been no mention of recurrent cases of leiomyoma.

comment

Surgery should always be advised in any case on which a diagnosis of leiomyoma of the esophagus is made. This advisability is supported by the following facts: (1) Symptoms are a reason for operative intervention. (2) Prompt removal of any mass is imperative when malignancy can-

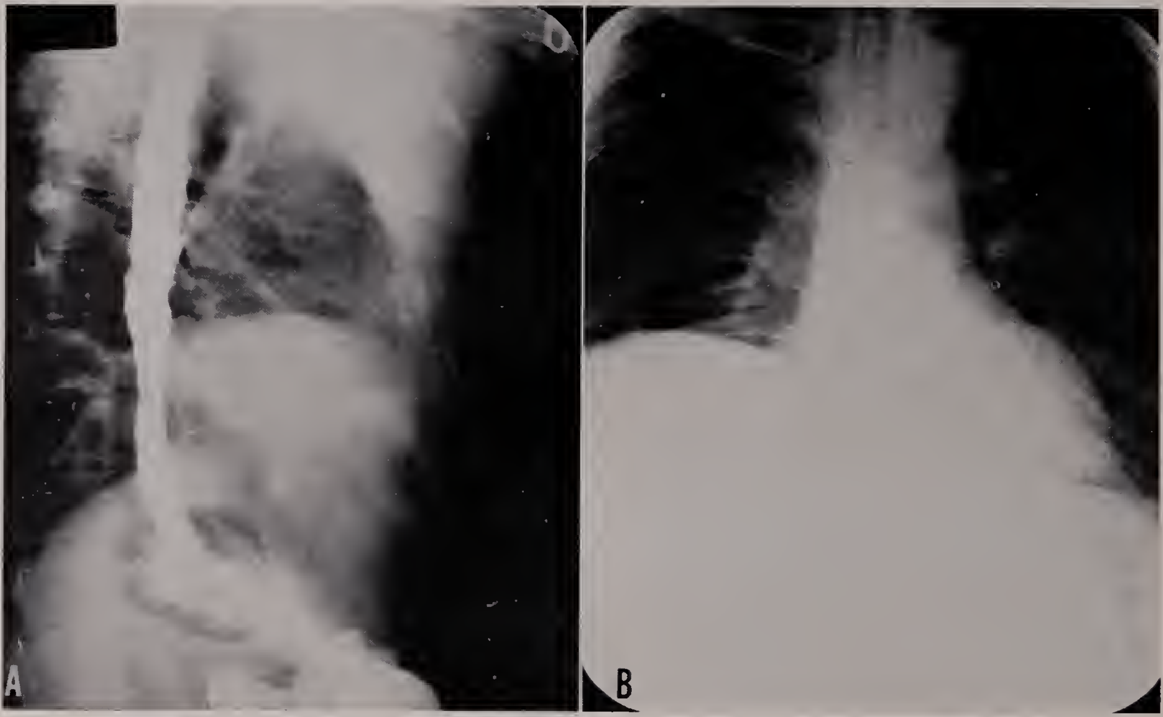

Fig. 4. A. Barium swallow on 9th postoperative day. Function is normal. Drains, visible in the film, were brought forward to emerge beneath the xiphoid. B. Chest, on 9th postoperative day, is normal.

not be ruled out clinically. (3) These tumors continue to increase in size, and, sooner or later, symptoms will appear or increase in severity and surgery will be necessary. Operation is desirable before age and tumor size debilitate the patient and increase the hazards of surgery. Aseptic degeneration or calcification might develop and could complicate the problem of surgical removal. (4) Sarcomatous degeneration of benign myomas in the esophagus have been reported.[6, 7]

When a preoperative diagnosis of leiomyoma of the esophagus is considered, one could formulate a specific surgical approach. However, in the event of an error in the preoperative diagnosis, one should be in the position to handle any problem properly. The best access is transpleural. A standard thoracotomy incision can be used. The level of entry depends on the level of the tumor. The right thoracotomy is the choice for myomas in the upper two-thirds of the esophagus. The advantage of the approach from the right side in these high-lying lesions stems from the anatomical relationship of the esophagus on the right. The esophagus lies immediately subpleural throughout its entire thoracic course. All of the esophagus is readily accessible and can be readily delivered into the pleural cavity. The aorta, its arch and branches, do not interfere with mobilization of the upper two-thirds of the esophagus on the right as they do on the left. The azygos vein and the segmental avascular supply of the esophagus are clearly visualized and safely controlled. The lower third of the esophagus is readily accessible from both pleural cavities; and, therefore, both left and right approaches are equally serviceable in dealing with lesions of this segment. However, the right thoracic approach has no disadvantage, even though an esophagogastric resection turns out to be necessary. An esophagogastric myoma, which often requires excision or resection, is best dealt with through an approach from the left side. By adding a diaphragmatic extension, and if necessary, extending it through the abdominal wall, the resection is facilitated by working through a single incision. An unobstructed view of the entire field is obtained. Adequate exposure, gentle handling of the tissues, and avoidance of devascularization are paramount.

The operative procedure is influenced by the relationship of the tumor to esophageal mucosa and the location of the tumor. This can be determined only at the time of operation. Surgical removal may be accomplished in four ways:

1. Enucleation is the preferred method. It is applicable in the majority of cases. Enucleation is simple. However, if the mucosa is inadvertently torn, it should be closed with interrupted sutures, preferably of triple 0 chromic catgut with the knots tied within the lumen. The wall can then be reconstructed with interrupted 4-0 silk sutures.

2. Enucleation with excision of mucosa. Frequently, the tumors are firmly attached to the mucosa by infiltrate of the tumor or by inflammation secondary to ulceration or biopsy. Thus, total enucleation cannot be accomplished. The tumor can be removed by excising the adherent portion of the mucosa with it. The mucosal defect is then closed. The natural elasticity of the esophagus can compensate for a surprising amount of narrowing.

3. Resection. When neither enucleation nor excision is feasible, resection of a narrow segment of esophagus and primary end-to-end anastomosis should be considered. This type of procedure would be very rarely needed. However, the anastomosis must be free from any tension because the esophagus shortens on its longitudinal axis.

4. Esophagogastric resection. This is a formidable procedure and should be resorted to last. Continuity of the alimentary tract must be re-established by esophagogastric anastomosis or a jejunal or colonic interposition. The greater the extent of the esophagectomy, the greater the morbidity and the mortality. These are the cases in which the majority of the leaks and complications occur. Therefore, enucleation or excision should be attempted in every patient before an esophagogastric resection is carried out.

A few deaths and complications can be expected in the cases subjected to myomectomy. The reported mortality varies from 4.7 per cent to 9.3 per cent. [2, 5] The morbidity and mortality will depend upon the preoperative status of the patient as well as the technical injuries or failures that may occur during the procedure. The preoperative status of the patient depends upon the nutritional state of the patient, blood deficits, obstructive sequelae, co-existing systemic diseases such as: hypertension, cardiac disease, cardiovascular accidents, pulmonary emphysema, bronchiectasis, pulmonary fibrosis, and diabetes. Some specific anatomic injuries may occur. Injuries to the thoracic duct with subsequent chylothorax may result in a long postoperative recovery or even death. There may be injuries to the trachea or vascular injuries to the aorta or vessels of the arch. The azygos vein may be injured inadvertently and not repaired. There may be inadvertent opening of both pleura. This is most likely to occur in the left thoracotomy approach in the middle and lower third lesions.

Technical factors affecting the integrity of the anatomosis or closure which may cause an esophageal leak and subsequent demise include: tension of the suture line, excessive devascularization, using a running suture instead of interrupted sutures, and overlooked tears. Miscellaneous postoperative complications such as oliguria, anuria, thrombophlebitis, venous thrombosis, pulmonary embolism, and cerebro mascular accident must be considered. To obtain a low complication rate, the entire procedure must be done with meticulous care to preserve the vascularity of the organ, to secure all leaks and rents, to institute proper drainage methods—both mediastinal and pleural—to use antibiotics as needed, and to demand good nursing care with observance of all minute details in the postoperative period.

summary

Leiomyoma of the esophagus is an interesting tumor. Surgical removal is the only effective treatment. Smooth muscle tumors are radioresistant. Although untreated benign tumors of the esophagus rarely cause death, no conservative treatment is known to be effective. Operative mortality is low and the prognosis is good after enucleation. Thus, inspite of the rarity, the total number of five-year survivors will outnumber the total five-year survivors with treated carcinoma of the esophagus. ■

abstracto

Leiomiomas del Esófago, una vez considerados ser raros, estan siendo encontrados mas frecuentemente. El síntoma más común que preséntase es disfagia no fuertte, pero progresiva lentamente. Dolor, si está presente, es debido a ulceración producida por el tumor. El diagnóstico requiere un trabajo en conjunto realizado por el clínico, el radiologista y el endoscopista. La mayoría de los tumores pueden ser enucleados sin daño de la mucosa pero algunos requieren excisión de la mucosa, seguido por la respectiva reparación. Resección y anastomosis son ocasionalmente necesarias. Esofago-gastrica resección es el mas difícil prosedimiento tecnicamente. Resultados del tratamiento quirúrgico son usualmente buenos.

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Paracervical Block

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The paracervical block, a very safe analgesia, was found not to provide sufficient duration of pain relief in certain cases. A mixture of mepivicaine, tetracaine, and phenylephrine provides prolonged analgesia without increasing fetal or maternal morbidity. There was no adverse maternal response to the anesthetic agent. Fetal heart tones were closely monitored and abnormal heart rates were compared to those observed in a group of patients who received mepivicaine alone in the paracervical block.

The ease and safety of the paracervical block have been well documented. However, we have found that the duration of analgesia was not sufficient in certain cases and that a repeat block was needed. Often this loss of analgesia occurred during the second stage of labor and other less desirable anesthesias were used. It is the purpose of this paper to show that the combination of mepivicaine, tetracaine, and phenylephrine is an effective mixture of agents to produce prolonged duration of paracervical analgesia and anaesthesia without increasing fetal or maternal morbidity.

Initially, ephinephrine was used to prolong the effect of the paracervical block. However, Kobak and Sadove[1] stated that epinephrine is contraindicated because of its effect on the fetal heart rate and uterine activity. Mepivicaine, tetracaine and phenylephine theoretically appeared to be a safe combination that would produce prolonged analgesia. In fact, Soderstrom has used it in over a thousand paracervical blocks with good results.[2] Mepivicaine is an amide type of local anesthetic that is detoxified in the liver. The maximum suggested dosage is 500 mg. It is of fast onset and intermediate duration. Tetracaine, an esterified type of local anesthetic is detoxified in the serum as well as in the liver by esterases. The onset is delayed, but the duration is prolonged.[3] The maximum suggested dosage is 50 mg. Phenylephine is a monohydroxyl derivitive of epinephine. It is a powerful alpha receptor stimulant with little effect on the beta receptors of the heart. An intravenous dose of 2 mg is needed to produce an elevation in blood pressure.

procedure

The solution is prepared in the following manner: 50 cc of 1 per cent mepivicaine is poured into a sterile solution cup, Figure 1. A few cc of the mepivicaine is then used to dissolve 20 mg of tetracaine, and this is added to the solution. Two-tenth cc of 1 per cent phenylephrine is measured in a tuberculin syringe. Using the "Iowa Trumpet" and a six-inch needle, the injection is made in the lateral vaginal fornix at 3 to 4 o'clock. Care is taken to insert the needle only 5 to 7 mm into the mucosa, exactly in the angle between the cervix and the laterial vaginal wall and injection is limited to 8 cc. This procedure produces a palpable wheal at the injection site and yields the most consistent results. A five-minute interval is allowed before injecting the opposite side at 8 to 9 o'clock. Since approximately 16 cc of this solution is injected, the patient receives 190 mg of mepivicaine, 6 mg of tetracaine and 0.7 mg of phenylephrine, all of which are well below the maximum suggested dosage. Selection of patients to receive the mixture was based on the estimated duration of

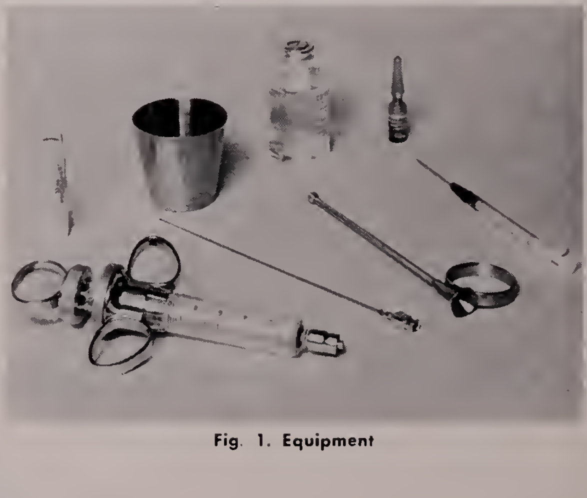

Fig. 1. Equipment

Study was made in 1965 when the authors were residents at Sacred Heart Hospital, Spokane, Washington.

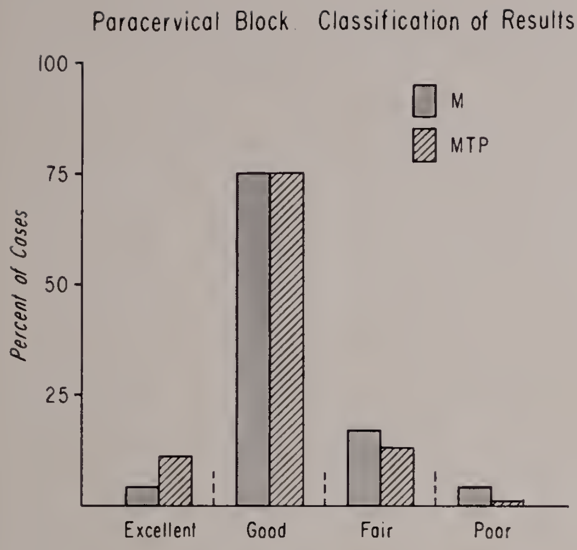

Fig. 2

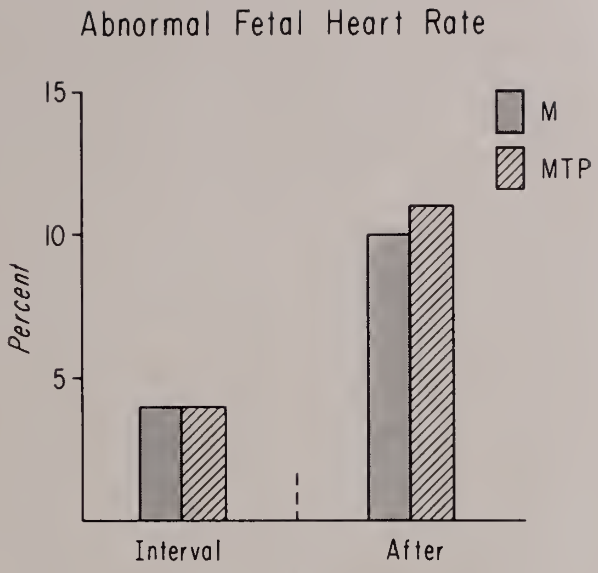

Fig. 3

labor. Therefore, most of the patients in this group were primigravidas.

The fetal heart tones were checked before any anesthetic was given, at least three times during the five-minute interval before injecting the opposite side, and approximately every 2 minutes for 15 minutes after completion of the block. Maternal pulse, blood pressure, and symptoms were observed throughout the procedure. An estimate of the efficacy of the block was made and each result classified as (a) excellent—complete relief; (b) good—relief of pain with some pressure sensation; (c) fair—incomplete pain relief; (d) poor—no relief. A total of 413 paracervical blocks were given during the period of this study. Mepivicaine alone was used for 269 patients and 144 patients received the mepivicaine, tetracaine, and phenylephrine mixture. Ninety-six per cent of the mepivicaine group and 99 per cent of the combination group received some degree of relief. The other four per cent and one per cent respectively, who were classified as having received poor results were given an additional 5 cc of anesthetic on each side. With this addition, all patients had some degree of pain relief, Figure 2.

All blocks were given at 4 to 6 centimeters cervical dilatation. The duration of anethesia was calculated as that interval from the time the block was completed until the patient again complained of pain. The onset of anesthesia was found to be immediate, usually noted with the following contraction. Termination was nearly as abrupt. If there was no loss of anesthesia until delivery, the time of delivery was used as the end point. The average duration of anesthesia from mepivicaine alone was 72 minutes which compared favorably with the findings of Pitkin and Goddard.[4] However, the average duration with mepivicaine, tetracaine, and phenylephrine was 173 minutes, which is nearly two and one half times that of mepivicaine alone.

results

Abnormal fetal heart rate was defined as that lower than 100 per minute or above 160 per minute. Even very brief episodes of abnormality were included in this study. In the mepivicaine group, there were abnormal heart rates in 11 (4.0 per cent) during the interval between sides compared to 6 (4.1 per cent) in the mepivicaine, tetracaine, and phenylephrine group. All of these changes were very transitory and all were back to normal in the usual time for injection of the opposite side. After completion of the block, there were 27 (10 per cent) cases of abnormal fetal heart rate in the mepivicaine group and 16 (11.1 per cent) in the mixture group, Figure 3. Six of the 27 and 2 of the 16 had abnormal heart rates both between sides and after completion of the block.

All infants were given an Apgar rating at one minute following delivery. The average Apgar score was 8.7 in the mepivicaine group and 8.6 in the mixture group. Nine (3.3 per cent) infants in the mepivicaine group had Apgar scores below

6 compared to 5 (3.4 per cent) in the mixture group. However, only 3 (1.1 per cent) and 2 (1.4 per cent) respectively were associated with abnormal fetal heart rates during labor. The scores at five minutes were 9 or 10 in all cases. There were no neonatal deaths.

discussion

We feel that the technique of injecting exactly in the lateral fornices and placing the fluid submucosally so that a definite wheal is palpated will produce the best results. In the total group of 413 patients, only 3 per cent had poor results that required immediate re-injection. By re-injecting with a lesser amount (5 cc) on each side, analgesia was produced in all patients. Over 80 per cent of these were good to excellent. Only one patient in the group who received mepivicaine, tetracaine, and phenylephine had a poor result. The other poor results received mepivicaine alone. Abnormal fetal heart rates were noted at some time in about 14 per cent of each group. This may seem high; however, all patients were included who had fetal heart rates below 100 per minute or above 160 per minute, no matter how briefly. If these persisted for one minute, oxygen was given to the mother by mask and she was placed in lateral decubitus position. In all cases of abnormalities during the interval between the two sides, the rate was normal within one minute.

All abnormal fetal heart rates within 15 minutes of completion of the paracervical block were recorded. This included 43 patients with no difference between the two groups. Again, most of the fetal heart rates reverted to normal within one minute. However, one patient had intermittently depressed heart rate until delivery was completed. This infant had an Apgar of 4 at one minute but responded nicely. The Apgar at 5 minutes was 10 and there were no problems in the neonatal period.

Five of the infants who had abnormal heart rates during labor also had Apgar scores below six at one minute following delivery. Nine other infants were born with Apgar scores below six who had displayed no sign of distress during labor. At five minutes, all Apgar scores had increased to 9 or 10.

No maternal reactions to the local anesthetic agents were noted in this group of patients. Stimulation of labor with intravenous pitocin was initiated any time there was a decline in the forces of labor following the block.

summary

The paracervical block produces good analgesia in labor for most patients. A combination of mepivicaine, tetracaine, and phenylephrine yields a paracervical block that is effective more than twice as long as mepivicaine alone. This increased duration is obtained without increasing maternal or fetal morbidity. ■

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chemical nomenclature

generic	trade
mepivicaine	Carbocaine
tetracaine	Pontocaine
phenlyephrine	Neo-Synephrine

abstracto

El bloqueo paracervical, una muy segura analgesia, fue observado que en algunos casos no proveía una suficiente duración del tiempo de analgesia. Una mezcla de mepivicaina, tetracainay phenylephrina provee una prolongada analgesia sin aumento de la morbilidad fetal o maternal. No hubo en la madre respuestas adversas al agente anestésico. Los tonos fetales fueron monitorizados y anormales frecuencias cardiacas fueron comparadas con aquellas observadas en un grupo de pacientes los cuales recibieron solamente mepivicaina en el bloqueo paracervical.

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Narcotic Addiction of Physicians

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His urgent need for help should be recognized by the colleagues of the physician addict. Official action should be sought as soon as the problem is detected. Physician addicts show striking similarity in early life characteristics, psychopathologic patterns, age of onset of addiction, and exogenous factors leading to addiction. It is a manifestation of depression and, in keeping with depression, the suicide rate is high. Treatment is rewarding. Most physicians can be rehabilitated and returned to practice. Change of specialty has been shown to be a valuable factor in rehabilitation.

Sometimes it is worthwhile to consider how one becomes an expert or develops a special interest in a field of medicine, such as drug addiction of physicians. Personally, I have developed a special interest in this problem since masquerading as an expert two years ago as an invited speaker at a state medical association meeting where I read a second paper on a subject which I thought I knew something about. The program chairman needed a narcotic expert and did not seem to mind that I had direct clinical experience with about half a dozen physician addicts only and some administrative connection with perhaps two dozen others. So I was reduced to reviewing the literature, interrogating psychiatric colleagues and ruminating about various features of my few cases.

reports are infrequent

As the literature is reviewed, one finds a scarcity of papers on a subject which really is of tremendous importance to medicine. Most studies tend to come from United States Public Health Service Hospitals, state disciplinary boards or prominent private mental hospitals. A 30-year period was required by Wall[1] to gather a series of 44 physician addicts studied at the Westchester division of the New York Hospital and Modlin and Montes[2] needed a 15-year period to assemble a series of 25 patients studied at the C. F. Menninger Memorial Hospital. These two papers are mentioned in that they pay particular attention to the personalities of these patients and are in substantial agreement as to their findings.

Perhaps the paucity of papers on the subject of narcotic addiction of physicians is due to our tendency to make a moral judgment of each case which comes to our attention rather than to consider it a medical problem. As a patient, a physician addict is apt to be regarded by his peers as a nest-fouling bird and is apt to be met with hostility, scorn and rejection. It is the purpose of this paper to present narcotic addiction of physicians as a clinically valid psychiatric entity, namely a depressive syndrome.

If narcotic addiction of physicians is regarded as a depressive illness, some understanding can be reached of its onset, clinical course and treatment. Regarding addiction as a depressive illness helps answer the question of why it first appears in the middle or late 30's after five to ten years of productive medical practice. What better way is there for us to gain insight than to regard this socially unacceptable, medically reprehensible condition as a form of social suicide? There is no more effective nor more convenient way for a physician to destroy himself. Ready accessibility of drugs has led to an incidence of narcotic addiction in physicians reported as varying from 30 to 100 times that of the general population. In short, it is an occupational hazard, which interestingly occurs at the same incidence from each of the United States, England, Germany, Holland and France. Fifteen per cent of known drug addicts in these countries are physicians, with another fifteen per cent members of paramedical occupations.

psychopathology

Aside from depressive symptomatology and good results from depressive treatment regimens, such as electroshock therapy, a good case for a depressive etiology of narcotic addiction of physicians can be made by longitudinal studies of common personality traits and psychodynamic

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factors. These elements of depressive illness have been noted with great frequency in the life histories of these patients. In most reports they have not been studied in a way so as to be statistically valid. However, there are factors which seem to appear often enough that one is entitled to certain impressions.

The early development of individuals in this group shows a pattern of unduly long periods of illness and convalescence with the usual childhood diseases. In general, this phenomenon does not seem to be fostered by parents. In addition to the usual childhood diseases, there seems to be a high incidence of intestinal colic or feeding disturbances. Many give an early history of being enuretic.

From early childhood, physician addicts tend to avoid close attachments to either parents or siblings. This inability to relate to others or to show genuine friendship amounts to a clearly defined defect. The fathers of these physicians are usually described as stern and depriving, indifferent, rejecting and withdrawn, or inconsistent, volatile and emotionally unstable. Modlin and Montes state that in the study of their group of 25 physicians, over 50 per cent reported their fathers having a drinking problem and only three of the 25 thought their fathers liked them. None thought that he was a favorite son, and many claimed that a preference was expressed for a brother. Four had close bonds with their mothers, while 21 usually described them in critical or resentful terms. The attitude of physician addicts towards their mothers is usually very ambivalent, with a conflict between marked feelings of dependency and a resentment of material domination.

Physician addicts report an odd type of adolescence with a significant absence of the usual rebelliousness, idealism, and cynicism, which are customarily expressed by turbulent or erratic behavior. Compliance with demands of parents and other authority figures is the rule. In the field of academic achievement this group is generally above average for their classes, and this holds true for professional education as well. Sexual conflicts of adolescence are intense with masturbation accompanied by profound guilt feelings. Pursuit of heterosexual experiences is often inhibited and delayed.

In analyzing 44 physician addicts, Wall comments as follows: "The outstanding personality traits are a sensitive tendermindedness with a tendency towards hypochondriasis, to tire easy, and inability to stand life when the going was rough and hard. Twenty-eight were immature, felt inadequate and withdrawn, somewhat irresponsible and unreliable, lacking in staying power, qualities commonly met by the so-called psychopathic personality. Twelve were of the neurotic type with a long history of generalized tension, visceral tension, headaches and insomnia, and periods of neurasthenia and depression. Four were definitely retiring, shut-in, and schizoid in make-up."

bogus socialization

In respect to socialization there seems to be a difference between addicts and alcoholics. Physician alcoholics seem to be driven towards a superficial or bogus type of socialization with an uncritical acceptance of strangers as friends. Physician addicts are just the opposite and show an increasing withdrawal from community and family affairs. In this there appears to be a direct connection to the independent, aloof attitude seen in these individuals in childhood.

An early tip-off to withdrawal is often seen as a hiding behind an apparent dedication to work. This might be acceptable to a non-physician, but upon close examination by other doctors this should, indeed, appear to be an untenable excuse for years of neglect of family or for failure to form warm, interpersonal relations. When this hiding behind a dedication to medicine is looked at clearly, it usually emerges as aimless activity in the guise of work, a disorganized business which accomplishes little, or a compulsive involvement with minutiae, which could be easily delegated. A similar trait mentioned occasionally is the following of a single-minded type of hobby, which by its nature excludes everyone else.

There is something about the personalities of physician addicts which does not allow them to stand prosperity. They show a definite ability to disclose inadequacies. They seem to have a drive to get associates, and particularly superiors to reject them and to oppose them. They do this by behavior which obviously produces distaste and hostility by those who might otherwise be inclined to be accepting. Medical staff duties tend to be erratic and unconventional. Elective procedures are scheduled late at night, and rounds are made at unorthodox hours. Hospital work is generally performed at times when authority figures are least likely to be encountered. Often this behavior inappropriateness extends to accident proneness. Something disagreeable or disastrous always seems to happen.

sexual adjustment

The sex lives of physician addicts are seldom satisfactory. Durable, incompatible marriages commonly prevail, with much discord, recrimination, and misunderstanding. There seems to be a stereotyped inability to establish satisfactory sex relationship on a continuing basis. Physician addicts seem to be dependently attached to their wives, constantly checking to see whether or not they are really loved, and in turn they are unable to show affection themselves, due to their unresolved ambivalent conflicts stemming from attitudes towards their mothers when they were children. Most physician addicts have serious sexual difficulties when it comes to performance, being either impotent or prone to premature ejaculations. Of course, in each instance these become progressively intensified by narcotic addiction.

Most physician addicts show a singular attitude towards children. They are reluctant to have them in the first place, and if they arrive, dissatisfactions are overtly expressed and the sharing of obligations of upbringing is disclaimed. So little interest is shown in children that often they are regarded as rivals for the affection of the addict's wife, and a struggle for this ensues.

As might be expected from physician addicts' predisposing personalities, they tend to choose their wives in a manner plainly indicating a search for a parental surrogate. Invariably, they establish a dependent relationship, demanding much emotional support from wives, in spite of the fact that very little is given in return. Often wives are regarded more as mothers, which may explain the prevalence of heterosexual incompatibility and the prevalence of promiscuity. The latter is a striking feature which bears emphasis. Generally sexually immature and inadequate with their wives, physician addicts are prone to frequent extramarital affairs, and in their conduct of these there is a certain administrative inadequacy, one might say almost an accident proneness to get caught and known.

time of onset

In Wall's series the average age at the time of admission was 43; the average age of addiction was 36. For 25 physicians evaluated by Modlin and Montes, the age of the first use of narcotics was 38 and with the average of three years of onset to admission to the Menninger Hospital two-plus previous hospitalizations had occurred. In a survey of 68 male physician addicts discharged from the United States Public Health Service Hospital in Lexington, Kentucky, Putnam and Ellinwood[3] report the most common age of physician patient was between 41 and 50, the average age being 46 years and 6 months.

Wall reports the following reasons for the taking of narcotics initially by his group of 44: "The drug was taken first to relieve pain following fractures in four, hand infections in two, stomach ulcers in six, and headaches of the migraine type in ten instances. Twelve addicts took drugs when troubled over their relationship with their wives. Jealousy feelings of not being loved or understood were the complaints. In most instances, tension, fatigue and boredom were noted. Addiction followed within a few weeks or months after the beginning to take drugs."

Overwork, chronic fatigue and physical disease are the classic reasons described in the medical literature for the onset of addiction of physicians. These people seem to be unable to organize their time and medical affairs. They complain of fatigability, which seems inappropriate for their age group. Perhaps when they complain of being tired they are actually saying that they are tired of being constantly called upon by their patients, that they are drained of energy and desire to do anything further. This is a common feeling known to all doctors in clinical practice at times, but in respect to this complaint, physician addicts seem to be unable to take customary measures for relief, such as vacations, an active family life, participation in community activities, hobbies, etc.

In summary, the dynamics of narcotic addiction of physicians seem to involve dependent individuals of superior academic and intellectual endowments who have shown a lifetime striving for high orders of attainment in the future, and in the quest for their personal great expectations they have been markedly supported by the applause brought about by their efforts. Finally, however, great expectations of the future become missed opportunities of today. Unattained professional accomplishments, financial problems, practice demands, and family complications bring these people into contact with the hurly-burly of life for the first time. It is the development of insight that life has not turned out the way expected that leads to depression and despair and ultimately to the socially suicidal solace of narcotic addiction.

treatment

The treatment par excellence for the clinical symptomatology of depression is electroshock therapy. I consider myself professionally fortunate to have received psychiatric training in a state hospital at a time when the efficacy of electroshock was being determined by trial with a great variety of clinical conditions. The pendulum has so swung today in many state hospitals that electroshock therapy is seldom available, even for those patients with clear clinical need. Thus are trainees deprived of a chance to develop clinical judgment as to the indications and contraindications of a most valuable therapeutic method.

When should electroshock therapy be given to a physician addict? Although many come to the hospital in poor physical condition, and one aspect of rehabilitation is to improve the patient's physical well-being by medical measures, there is no good reason to delay electroshock therapy one day beyond the time that medical clearance for the treatment is given. Not only can electroshock therapy be given during withdrawal from narcotics, but it is a most effective treatment of withdrawal symptoms. An attractive explanation for this is that withdrawal symptoms are diencephalic and autonomic disorders, and electroshock has a neurophysiologically desynchronizing effect on the cerebral cortex and diencephalon.

There is a dearth of detailed case reports of psychotherapeutic progress with physician addicts in respect to various schools of psychotherapy. More important are social-psychological factors that apply to the proposition of being a physician. As soon as withdrawal has occurred, depression has been treated, and physical well-being improved by medical measures, the impact of the bind in which the physician addict finds himself is brought home full force. Above all, he finds that he does not want to give up the identity of doctor, which has been his shield and protection for so many years and which he worked so hard to obtain. Being a doctor is a very personal thing involving much more than engaging in the business of medicine. It is not only a way of life, but it is life itself. Thus, the practice of medicine is perhaps the major source of self-esteem remaining, and it is understandable that the physician addict does not want to give it up. When this is taken away from him by a revocation of his license or by imprisonment, he has received the equivalent of a death sentence.

need for help

In spite of physician addicts' attitudes towards the practice of medicine, very few will break away from narcotics on their own. They have an inherent capacity for rationalization, simulation, vacillation, subterfuge and prevarication, and with these characteristics they are no different from the general addict population. Thus, it is at this point that state boards of medical examiners and state disciplinary boards enter the picture. The responsibilities of these boards are dual; first, to protect the public; second, to rehabilitate the physician and restore him as an active, participating member of his profession.

A survey[4] to which 48 states responded shows that 44 have provisions for placing an addicted physician on probation in order to carry out the latter responsibility. Boards are authorized to suspend or revoke licenses, to stay these actions and to place a doctor on probation for a specified length of time during which he may continue to practice medicine, but with the provision that his narcotics stamp be surrendered. It is disstressing, however, to note in the same report that while 18 states require psychiatric treatment, one state was noncommittal, and 29 states require no treatment whatsoever. Two states requiring treatment specify that physician addicts must enter United States Public Health Service Hospital at Lexington, Kentucky.

Most treatment oriented examining or disciplinary boards approach the rehabilitation process with a clear understanding that they are undertaking a long-term supervisory responsibility of major psychological complexity. Psychiatric treatment is impossible without the benevolent yet coercive power of state boards composed of a physician's peers. As soon as an understanding has been reached with these authorities, the first requirement for successful treatment of physician addicts is hospitalization. Only when withdrawal from narcotics has been completed, depression treated and concomitant medical conditions cared for can realistic rehabilitation begin.

Long-term supportive psychotherapy is advised, but this alone is a waste of time. More important is a co-ordinated, planned effort by medical authorities, the physician's family, immediate colleagues, and a psychiatrist of his choice. Upon hospitalization it is necessary that effective work be done with the patient's wife at once. Not only is she a valuable source of historical material, but her attitude toward her husband and her capacity for understanding his condition need to be appraised early. It is necessary for her to understand that narcotic addiction is a manifestation of a depressive illness, and even though she has experienced many years of marital difficulty, personal abuse, and impaired social position, she should defer a decision about divorce or separation until her husband is no longer depressed. Usually, there is a very small percentage of physician addict's wives who seriously consider abandoning their husbands; most stick with a surprising tenacity.

When the personalities of the wives of physician addicts are studied,[5] it seems that many have a need for keeping their husbands in a dependent condition and often show very subtle ways of continuing psychological stresses that are relieved by drug taking.

Oregon statistics

Physicians of Oregon are indeed fortunate in having a Board of Medical Examiners that supervises discipline in a responsible, yet rehabilitative manner. I am in debt to the Board and its personnel for their efforts in making categorical statistics available without compromising the identities of physicians under their jurisdiction.

In statistics made available by the Board covering disciplinary problems of narcotic addiction from July 1, 1949, to June 30, 1965, 31 physicians and osteopaths were involved as compared to 36 with alcoholism. Thus these two violations constitute the main sources of disciplinary problems.

As in the case in most reports covering approximately the same period, meperidene (Demerol) by far is the drug most frequently used. As the major drug it was listed in 20 cases, compared to morphine in five, dihydromorphinone (Dilaudid) in three, and Pantapon, Percodan, and methadone (Dolophine) in one each. In eight instances a variety of narcotics were taken.

Of the physician addicts, 17 were general practitioners, and specialities were represented as follows: eight internists, three pediatricians, two surgeons, one anesthesiologist, and one obstetrician. Age of onset of addiction averages 37.8 years.

Action taken by the Board in the 31 cases has been revocation of 14 licenses and of these the revocation has been stayed in seven cases and probation substituted; 12 licenses have been suspended with stays and probation in ten cases; no action was taken once; one case was tabled; and one license was surrendered without further action.

There have been two suicides, before the board could act, while cases were under review. The fact that suicide is universally the most serious complication of narcotic addiction of physicians attests to its depressive psychopathology and the six suicides occurring in this Oregon series is about on a par with other reports.

There were four deaths, in the group of 31, from causes other than suicide, so that at the present time six cases have been closed as being rehabilitated and thirteen are continuing on probation with the Board help.

benefit of role change

Recognizing that narcotic addiction of physicians is a manifestation of a psychiatric illness, the Board usually appoints a panel of three psychiatrists to assist in evaluation of the problem initially and to aid in supervision of rehabilitative progress. Of sixteen living physicians who have been rehabilitated, or who are currently progressing well on probation, it is interesting to note that medical roles have been changed in six instances with three general practitioners becoming two psychiatrists and a pathologist; a surgeon and a pediatrician becoming general practioners; and an internist changing to physical medicine.

From experience with several cases of my own I can testify to the effectiveness of role changing. Not only does the physician remove himself from the pressures of active practice, but in taking a residency or other training program he finds himself in a familiar situation where he has succeeded in the past. He again becomes a student striving for a future goal and this helps him repair his shattered medical charisma.

It is hoped that the presentation of these statistics from the State of Oregon will support the notion that narcotic addiction of physicians is definitely a psychiatric illness. Prognosis is very good when the illness is brought under control by treatment. Particularly in the case of narcotic addiction, physicians are victims of the V.I.P. syndrome; no one seems to want to step on their tender sensitivities. However, due to the high rate of suicide inherent in these depressions it is incumbent upon each physician to intercede in the behalf of a colleague when this illness occurs. Please, if the depressive symptomatology of addiction comes to your attention in a colleague, refer his case to the State Board of Medical Examiners so that responsible rehabilitation may be undertaken. ■

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abstracto

La necesidad urgente de ayuda debe ser reconocida por los colegas del médico adicto. Acción oficial deberá solicitarse tan pronto como el problema se reconoce. Los médicos adictos muestran marcadas similitudes en las caracteristicas de la vida temprana, normas psicopatológicas, edad en que la adicción se presenta, y factores exógenos que conducen a la adicción. Es una manifestación de depresión y a la par con la depresión la proporción de suicidios es alta. El tratamiento es efectivo. La mayoría de los médicos se pueden reabilitar y retornar a su práctica. Cambio de especialidad ha demonstrado ser un factor valioso en la reabilitación.

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Physician must be a student

The Ad Hoc Committee is aware of no evidence that establishes a close correlation between the length of training and proficiency as a physician. The Committee recognizes that time is an important element in maturation and that new knowledge is constantly being acquired. However, the crucial consideration is not how many facts the physician knows, but rather the principles and concepts he learns, his ability to find and use new information as it is developed, and his skill in problem solving. These qualities are not necessarily related to length of training. Furthermore, there is general acceptance of the facts that no physician can know everything, that learning must be on a selective basis, and that the physician must be a student throughout his lifetime, constantly augmenting his knowledge and skill by continuing education.

The report of the Ad Hoc (Willard) Committee on Education for Family Practice of the Council on Medical Education, American Medical Association, Sept. 1966.

Discussion on The Intrauterine Device

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Pharmaceutical firms have devoted huge sums to advertising and promoting hormonal pills for contraception. The intrauterine device, offering negligible profit, has had no such benefit. Nevertheless, it is the choice of an overwhelming majority of informed women when offered a choice of methods. Its minor drawbacks should be overlooked, in view of its long-term advantages.

The intrauterine device (IUD) promises to eclipse the pill as the major method of contraception in this country, if given a chance. And, given world-wide acceptance, it may easily become the single most important factor leading to improvement in human well-being. In spite of minor difficulties, it has many advantages for many families, and those physicians offering contraceptive advice should think beyond first objections.

acceptance

When choice of method is determined by the patient, there is no question about preference. In our clinics in Seattle, the majority of women asked for the IUD. At the University Hospital, 71 per cent chose it and at King County Hospital, the figure was 81 per cent. The same thing happens wherever women have information on methods and the opportunity to express their desires. The same order of preference has been expressed in Taiwan, Korea, and Thailand. There is little doubt that the data reflect attitudes of all informed women except those whose religion interdicts the practice of contraception.

There are no valid studies providing reliable information on comparison of methods. There are innumerable reports on the pill and on the IUD, but none offering a check of one against the other. The separate studies do not report on the same factors. Nevertheless, it is possible to cite a number of comparative advantages of the IUD.

advantages

The pills are said to be virtually one-hundred per cent effective, when used as directed. The IUD has a small failure rate. What is being overlooked is the fact that the pills are often *not* being used as directed. When this happens and the woman becomes pregnant, this may be a user failure of the method—but a failure, nonetheless. Further, the effectiveness of the pills decreases, the longer a woman uses them, for sustained motivation is difficult. When she does stop them, data show that her chances of getting pregnant are greater than if she had never taken them at all. On the other hand, the major study conducted by the National Committee for Maternal Health indicates that the IUD becomes more effective during the second year of use. Thus, a patient for whom the IUD proves satisfactory in the first year, has an effective method for the duration of her contraceptive need. The pill patient, on the other hand, is exposed to the same or increasing risks of failure in subsequent years. This means that the risk to a particular patient may be greater with the pills than with the IUD.

One of the primary tenets in a good medical school education is *primum non nocere:* first do no harm. To those physicians who are concerned by some of the occasional problems encountered with the IUD, I would suggest that, from a physiologic point of view, the IUD is an inert plastic that sits in the uterine cavity acting merely on its own local environment. The pills affect many organs of the body with a potent hormone.

Furthermore, when a women comes into the office with breast tenderness, weight gain, and symptoms of early pregnancy, she deserves to be listened to. After all, we, as men, have never been in this condition, but it is quite clear that these are not pleasant symptoms to put up with. Doctors who offer the IUD find that such women infinitely prefer it to the pills, and are quick to value the local nature of its side effects.

Lastly, the doctor can well remind himself that the side effects of the IUD, increased bleeding, spotting, and cramping, are temporary symptoms which most women will put up with, and have put up with in the past, in the absence of the IUD. The fear that bleeding and spotting from the IUD would mask symptoms of early cancer has proved to be unfounded. Carcinoma of the

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Based on a paper read before Washington State Medical Association, Spokane, Washington, Sept. 20, 1966.

endometrium is extremely rare in premenopausal women. Reports coming back indicate that invasive carcinoma of the cervix is being reduced in the population using the IUD, because patients who would never have come in for cancer checks alone are receiving Pap smears and early treatment when they come in for insertion of an IUD.

There is still no evidence that the device causes infection. Women seem to have the same rates of pelvic inflammatory disease with and without the device. The relationship is not one of cause-effect, but of association only. Furthermore, most of the cases in a national study were treated with the device in place, all successfully.

pill promotion

There is tremendous vested economic interest in many of the methods of contraception available today. For example, the pill promises to be a one-hundred million dollar business this year. Witness the profuse advertising in medical journals and the increased numbers of detail men. On the other hand, the IUD is not a consumer item; it is inserted only once. It costs very little, and it makes very little profit. This is one of the reasons you see so little advertising of the IUD. We, as physicians, stand between the vested economic intersts and the patient. We have a deep responsibility to provide our patients with the best methods available today. For example, it is my responsibility if one of my patients goes to the corner drug store after her six-week, postpartum check, and buys some ineffective suppository for contraception because I have failed to offer her the better methods. It is my fault if she gets pregnant following the pills, if the IUD would have been better for her. If the physician sees through the bias of vested economic interests, and examines the question for himself, he will probably make the IUD available in his practice, since we are finding that, for many patients, the IUD is the method of choice.

technique

One objection to using the IUD is that it takes additional time to insert. It is widely accepted that a pelvic exam and a Pap smear are integral parts of every periodic check for a woman. But, once a patient is on the table, insertion of the IUD is a brief and simple procedure. All the medical students learn the technique by seeing one and inserting one. As some of you may know, the University of Washington has a ten-minute film on this technique, which was shown at the 1966 AMA Convention in Chicago. It is available for loan to individuals or groups.

mode of action

Some physicians object to using the IUD because they believe, and they tell their patients, that it is an abortifacient. If it were indeed an abortifacient, women would become pregnant—implantation would occur—and a woman's menstrual cycle would be prolonged. This has not been observed during careful followup of many thousand of patients using the IUD. Furthermore, there is considerable evidence indicating that the mode of action is due to increased tubal motility, which inhibits fertilization in some way. This work is being carried on by Mastroianni, who is Chairman of the Department of Obstetrics at the University of Pennsylvania. I understand that he has collected ova from the uterine cavities of monkeys, with the IUD's in place, and has found that all have *not* been fertilized.

selection of patients

Just who are the patients for whom the IUD is a better method than the pills? The first category is the pill-forgetter. Sometimes, the doctor knows beforehand who these patients will be. Sometimes, an unwanted pregnancy uncovers it. This is a matter of temperament, and not of intelligence.

The second category is the pill-disliker: the woman who suffers from side effects and is unhappy with her symptoms. For example a patient who has been given five different pills in the last six months came to our clinic recently. Her menses had stopped. We could not tell her whether she was pregnant or not. She probably should have tried the IUD after the first set of pills failed to agree with her.

The third category of patient for whom the IUD may be better is the woman with a completed family. We see so many women in their twenties who have all the children they can manage at present. It is preposterous to place these women on the pills, with the idea that they can keep from getting pregnant for the next twenty to twenty-five years.

need for the future

What does the immediate future hold? The Lippes Loop has proven very satisfactory. The larger sizes of the Loop have the lowest failure rates. We are trying to develop a device for those who cannot retain or tolerate the Loop The Saf-T-Coil is sometimes easier to get than the Loop. It comes presterilized. It has been included in the National study.

We need a better device for the nullipara. At present, we have a small series in Seattle—too small to tell anything about failure rates. Lippes Loop B has proven satisfactory for individual patients; in one or two cases, severe cramps followed insertion, but the patient persisted, and became very happy with it.

conclusion

Experience at two Seattle hospitals, and worldwide tests have shown that the IUD is an eminently practical and well accepted method of contraception. It may have other minor disadvantages and it may produce minor discomforts when first inserted, but it offers important significant benefits. Given adequate information, most women desiring contraception will choose it. ■

University of Washington School of Medicine (98105)

abstracto

Las casas farmacеúticas han dedicado enormes sumas para difundir y promover las pastillas hormonales contra la concepción. Los métodos intrauterinos que ofrecen ganancias insignificantes no han tenido tal beneficio. Sin embargo, es la preferencia de una mayoría abrumadora de mujeres informadas cuando se les ofrece métodos para escoger. Las desventajas pequeñas deberián pasarse por alto en vista de las ventajas a largo tiempo.

Cleaning up the mess

Twenty years ago, the socialists promised to make Saskatchewan a Mecca for the working man. Instead, we saw the greatest mass exodus of people out of an area since Moses led the Jews out of Egypt more than 3,000 years ago. Each of the other nine provinces which had a "private enterprise" government increased in population by leaps and bounds after 1945. On the other hand, Saskatchewan virtually stood still. Her population increased 12 per cent while the nation's increased 69 per cent. Since the war, 270,000 of our citizens left Saskatchewan to find employment elsewhere.

Finally, two years ago, our people decided they had been the Canadian guinea pig for socialism long enough. They threw the socialists out. The Saskatchewan Liberal Party campaigned on a straight program of private enterprise. We made no extravagant social welfare promises. Instead, we committed ourselves to reduced government spending, reduced taxes, incentive programs for industry, and so on. The people gave us the job of cleaning up the mess.

The Honorable W. Ross Thatcher, Premier of Saskatchewan, in The Freeman, January, 1967.

Medical Ethics And Due Process

P. L. HEITMEYER, M.D., Portland, Oregon

History has proved, I believe, that in questions of right or wrong society has, and should have, the last word. Society has contributed bountifully to all physicians. Not only has society enabled us to aquire special knowledge and skill, but significantly, endowed us with a special and particular possession known as public trust and confidence, a heritage on which we depend. Professionally then, individually and collectively, we have a responsibility to society to prove both by word and deed that we honor our debt to it and respect its endowment to us.

To aid us in meeting this responsibility, we long ago devised a code of medical ethics. As yet, however, we have failed to recognize and to implement a due process of ethics as we have for law. As yet we are using no dependable yardstick for measuring ethical content of conduct and as yet we exhibit a low sensitivity to the demands of a cybernetically oriented society. In this explosion of change era, the growth of the ethical content of conduct should equal or surpass that of our technical knowledge and skill. Conduct should be motivated and guided away from the cyclone theatening chaos of our present cybernetic revolution, and directed into an age of physical, social and egoistic self-sufficiency. Aims of our medical ethics should include the establishment of a climate of acceptance for all participants in the healing arts and sciences and the application of the power and force of knowledge equitably within all our professional groups.

On examining our Manual of Medical Ethics and Discipline, we find that the introduction begins as follows: "The Principles of Medical Ethics of the American Medical Association . . ." We should make it clear that principles of medical ethics should be for physicians—not for the AMA or for any other medical organization. They are of and for physicians. Neither an organization nor a structure can practice medicine or ethics; neither a hospital nor a committee can practice medicine or ethics. Only physicians can practice medicine legally and ethically, just as only persons can practice religion—not church organizations—not church houses. The best hiding place for medical ethics, and perhaps for religion, is within a maze or merry-go-round of organizational structures.

Great is our task, therefore, to clarify the meaning of and to implement the use of medical ethics as an effective motivating and conduct-influencing force. As a start, and as a springboard at the pool of knowledge, we can use interchangeably the terms morals, ethics and reflective morality, and plunge momentarily into a consideration of customs, laws and morals.

Customs are fundamental, simple guides. Born in this country, we tend to speak English, not Chinese. We are prone to follow the ways of those about us. We recognize that the due process of custom is imitation, motivated by group approval or disapproval. We are bound by custom. But not entirely bound; we transcend custom.

Laws have emerged on top of customs to modify them. They give us legal morality. Custom says it just isn't done; law says thou shalt not. Laws, including bylaws of medical groups, in or out of the clinic or the hospital, must be observed if our conduct is rightfully to be graded as ethical.

Reflective morality transcends law. Also, the due process of ethics transcends the adversary system of law. Examination of the due process of ethics shows that it is a reflective one, is open to all concerned and is duly made evident by both word and deed. It demonstrates openly a diligent and forthright search for clarity, truth and justice. It is concerned with the following questions: Do words and deeds demonstrate clearly a wish to do the right thing? What is the evidence? Is it clear, forthright and not concealed?

Ethics is a valuable commodity both to physicians who profit by selling it and to patients who buy it. It rightfully influences our prestige, power, privileges and income in proportion to professional and public trust and confidence. Along with our qualifications and competence, therefore, it is essential that it be evaluated and graded reliably and validly. It would appear self-evident, then, that physician-grading should not be entrusted to those who stand to gain professionally or economically by a colleague's loss.

Within our present society one is considered innocent until proved guilty by due process of law. Within the medical profession a physician, duly established, should be considered qualified and competent until proved otherwise by due process of grading. In the field of interpersonal relations a physician should be considered ethical until proved otherwise by due process of ethics. In order to secure dependability and validity, then, due process is essential throughout.

Society readily recognizes and accepts a due process of law. And in its place in matters of law that system is both legal and ethical. But ethics and law differ and their due processes differ. Only in questions of litigation involving medical ethics is the adversary system of law acceptable or ethical; in non-litigated questions of medical ethics, the due process of law is out of place, unprofessional and may taint or contaminate medical ethics. For the two cannot be equated, cannot be totally interchanged and should not be sold either wittingly or unwittingly to society as one and the same thing.

Within the practice of law, technicalities may be considered legal even though distasteful and unjust. Used, however, in the practice of medicine to replace professionalism and the true process of ethics, the adversary system becomes offensive to physicians generally and to society. Injustices, concealment, subterfuge, buck-passing, deadly administrative delay, abdication of official responsibility and sheer, raw, economic practices, all may be within the law and, therefore, technically lawful. But employed in the practice of, or in the administration of medicine they may open the door through which vectors may pass carrying contamination and infection throughout the whole body of medicine.

Dependable yardsticks for measuring and grading physicians' services are troublesome persisting problems. The revolution in medicine today centers around relative values and problems of power versus responsibility. Although reflective morality transcends law when due process is followed, experience demonstrates that in the organizational and administrative fields of medicine our bylaws are deficient or defective so that due process may not be followed, ethics may be subordinated to law and lip-service substituted for deeds.

The following statement dated September 19, 1966, from the chairman of the Judicial Council of the American Medical Association, may help clarify this: He stated, "The Department of Medical Ethics is a headquarters staff function. It serves as the secretariat of the Judicial Council. . . ." According to the *AMA News* recently, there has been some change; but as of October, 1966, ethics remain subordinated to law even in areas of non-litigation.

Further clarification may be gained from the article, "Doctors and the Rx Scandal," *Life,* June, 1966. In referance to legislation proposed by Sen. Philip A. Hart (D. Mich.), which would forbid physicians to profit from the sale of medication prescribed the article states, "As carried on before the Hart Committee—and outside it—the debate hinges largely on who is entitled to get the patient's prescription dollar. . . . "

Mr. Robert Throckmorton, who was general council for the AMA, insisted, according to the article, that the prescription problem referred to is not an ethical problem at all but a "sheer, raw, economic problem."

Society, however, may be a more powerful spokesman. And the real problem may hinge basically upon trust and confidence of the public and of the trust and confidence one doctor has for another doctor. Therefore, our stamp of approval may belong not upon "sheer, raw economic practices" but upon trust and confidence. And our task may be to protect that heritage and to apply its power and force equitably within all groups of our profession.

Life's article is just one of the many showing public awareness of conduct problems within the service industry of medicine. They demonstrate, I believe, that some physician policing is being done by the lay press. Therefore, there may be a defect in our self-policing system. Furthermore, I believe there are defects within the bylaws covering the duties of county and state committees on medical ethics as well as those of the Department of Medical Ethics of the AMA. And also, I believe that profesional as well as public trust and confidence could be increased by following officially a due process of ethics and the case method of examining, evaluating and grading the ethical content of problem-causing medically related conduct.

Improved professionalism could be brought about by matching lipservice with deeds; by matching physician image with physician conduct. Since medicine is both an art and a science, a physician may wear both legally and ethically his true medical front or hat artfully and scientifically. But concurrent activities such as those of education, law, politics and trade unionism, may influence and complicate medical conduct.

However, as long as his conduct remains consistent with his true medical hat or front, there is no subterfuge or deceit. But if a physician grades the qualifications and competence of a colleague while pretending to wear an educational or a scientific hat and at the same time his performance is that of another, such as a politician, his deeds serve to belie his hat, his front and his word-facts. His behavior, therefore, is unethical. Specifically, then, in order to be medically ethical, neither his medication nor his behavior can be sold or dispensed bearing false labels or fraudulent or unfounded claims. Quality of conduct short of this standard is capable of undermining both professional as well as public trust and confidence.

In the May 9, 1966, issue of *Medical Tribune,* refreshing information is found about medical ethics in 1920. In that year, Dr. Richard Clark Cabot, known to me especially because of his famous textbook on physical diagnosis, became Professor of Social Ethics at Harvard College. Perhaps I will remember him more now since I know he taught ethics by the case method for 14 years. And to me it seems basic that the due process and the case method are essential ingredients for the understanding and the use of medical ethics.

In conclusion, ethics transcend both customs and laws. Reflective morality, like law, has a due process. Openness, the due process and the case method are essential ingredients in the understanding, teaching and practice of medical ethics. ■

110 N.E. 39th Ave. (97232)

Saskatchewan's experience

Is there a lesson to be learned from Saskatchewan's experiences? I think there is—a rather horrible lesson.

If there are any Americans who think that socialism is the answer, I wish they would come to Saskatchewan and study what has happened to our province. Twenty years of socialism gave us industrial stagnation, retarded development, oppressive taxation, major depopulation.

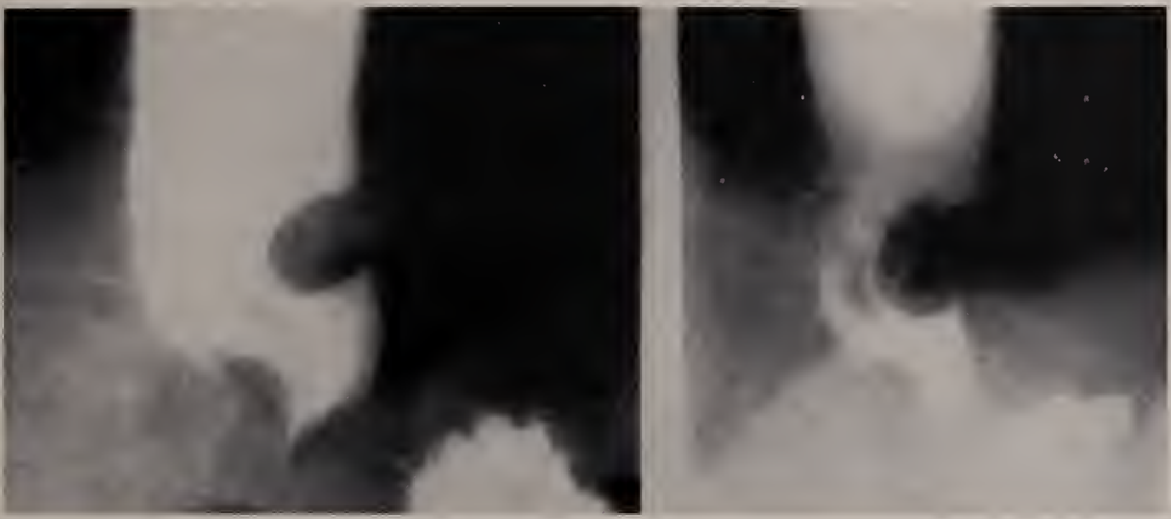
At this moment, you are doubtless saying to yourself, "It can't happen here." Yet, people all over the world are finding, "It can.

We know, as you do, that the private enterprise system is not perfect—but it is still the best system devised for progress. Under the system, Americans and Canadians have enjoyed the highest living standards in the world. It is our task to prove in the next few years that the private enterprise system can do more for our people than socialism.

The Honorable W. Ross Thatcher, Premier of Saskatchewan, in The Freeman, January, 1967.

X-Ray of the Month

SUBMITTED BY WASHINGTON STATE RADIOLOGICAL SOCIETY



A 41-year-old white male with upper GI bleeding. Two representative spot films of the lower esophagus are presented. What is the character of the lesion and the likely diagnosis?

see page 589

Don’t let monilia cut broad-spectrum therapy short…

start with Tetrex-F®

tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract… and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

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OREGON

Oregon Medical Association —2164 S. W. PARK PLACE, Portland, Oregon 97205

PRESIDENT *John E. Tysell, M.D., Eugene*
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EXECUTIVE SECY. *Mr. Roscoe K. Miller, Portland*
Annual Meeting, Sept. 19-23, Portland

Memorial Cancer Lectures July 28-29

The John Tomlin Memorial Cancer Lectures will be held July 28-29, at the Rogue Valley Country Club, Medford, Oregon.

Program topics are "The Essentials of Treatment of Hodgkin's Disease, Melanomas—Local or Regional Excision? Perfusion?, The Management of Pain in Cancer, Perfusion Techniques, and Chemotherapy."

Guest lecturers are Malcolm A. Bagshaw, Director of Radiotherapy, Stanford U. School of Medicine; John J. Bonica, Department of Anesthesiology, University of Washington School of Medicine; William S. Fletcher, Assoc. Professor of Surgery, University of Oregon Medical School; John S. Stehlin, Jr., Department of Surgery, Baylor University College of Medicine, Houston, Texas.

State Board of Medicine

Twenty-one physicians and surgeons were recently licensed to practice medicine and surgery or osteopathy and surgery in Oregon.

Those who received licenses to practice medicine and surgery are: Daniel Michael Devine; Curtis Lyle Hill; Christopher Willettes Hauge; Melvin Paul Judkins; Ben Richard Kuhner; Conley Gerard Lacey, and Mark Spencer Stryker, all of Portland.

Robert Loren Brown, Alamogordo, New Mexico; John Louis Campiche, Long Beach, Washington; Wesley Allen Cook, Jr., Durham, North Carolina; Hugh Willis Gardner, Salem, Oregon; Henry Thorvald Johnson, Jr., Corvallis, Oregon; James Calvin Kraus, Ukiah, California; William Henry McCarthy, United States Air Force; Michael John McKeown, Chicago, Illinois; Theodore Loraine Perrin, Omaha, Nebraska; Laurence Carol Taylor, Eugene, Oregon, and Willis Matt Tipton, Salt Lake City, Utah.

Those licensed to practice osteopathy and surgery are: Eugene Frederick Augter, Central Point, Oregon; Dale William Burroff, Rogue River, Oregon; Henry Alexander Spivey, Jr., Dallas, Texas.

The next regular meeting of the Board of Medical Examiners is July 13-15. The next State Board Written Examination will be given on July 11-13, 1967.

Training Program In Anesthesia

A six-month training program in anesthesia is being offered for physicians at the University of Oregon Medical School. The courses, individually arranged, can begin at any time after July 1, 1967.

The program has been given the approval of the American Board of Anesthesiology and the Council on Medical Education of the American Medical Association. Physicians who wish a six months' course of training will receive their instruction in the same manner as do the residents who select a two- or three-year program. They will be classed as residents and receive a certificate attesting to their service.

All types of anesthesia: general, spinal and regional nerve blocks are taught. Experience is obtained in the administration of anesthesia in patients undergoing plastic surgery, general surgery, ENT surgery, eye surgery, GU and GYN surgery and neurosurgery. Opportunities will be given to work with residents administering anesthesia to thoracic surgery cases, including open heart operations. All general anesthesia agents in common use are employed, and instruction in endotracheal intubation and resuscitation will be given.

The teaching program is under the direct supervision of the staff of the Division of Anesthesiology, six in number. All senior members of the staff are certified by the American Board of Anesthesiology. There will be clinical instruction and supervised experience in the daily administration of anesthesia in the operating rooms, as well as participation in related basic science seminars. Physicians in the course are also welcome at any of the many medical and surgical conferences held at the Medical School.

For additional information, contact Frederick P. Haugen, Professor and Head, Division of Anesthesiology, University of Oregon Medical School, Portland, Oregon 97201.

Board of Medical Examiners

Oregon State Board Written Examination

Date: July 11, 12, and 13, 1967 (two and one-half days)

Time: 8 o'clock a.m.

Place: The library, University of Oregon Medical School, Portland, Oregon

Objective Multiple-Choice Examinations:

Tuesday, July 11	
Anatomy	8:00-10:00
Pharmacology	10:15-12:15
Physiology	1:00- 3:00
Biochemistry	3:15- 5:15
Wednesday, July 12	
Pathology	8:00-10:00
Microbiology	10:15-12:15
Medicine	1:00- 3:00
Obstetrics and Gynecology	3:15- 5:15
Thursday, July 13	
Preventive Medicine/Public Health	8:00-10.00
Surgery	10:15-12:15
Effects of Radiation Exposure	12:15-12:30

On Thursday afternoon the applicant will appear for personal interview. Osteopathic Physicians and Surgeons will write examination in "Practice of Osteopathy." They will not write an examination in "Medicine" or "Materia Medica and Therapeutics."

OBITUARIES

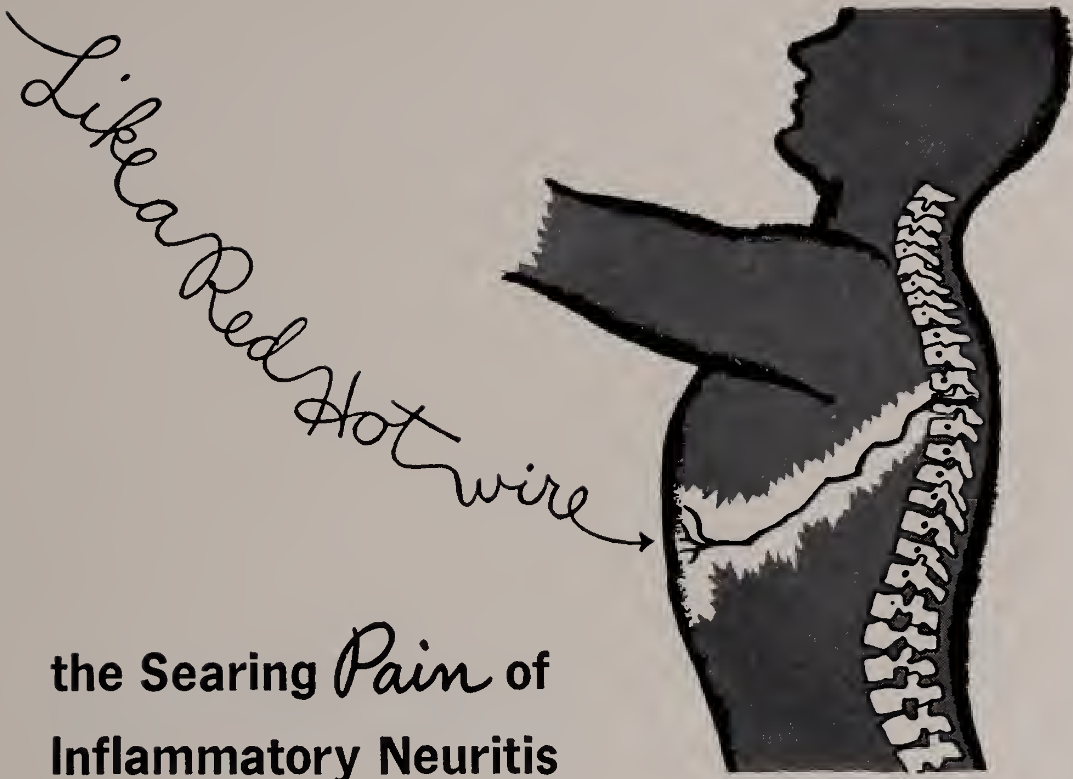
DR. JOHN C. VANDEVERT, *Bend, died March 14. He was 79. Dr. Vandevert was born in Holbrook, Ariz. He moved to Oregon with his family in 1891, to the Bend area a year later. He attended Willamette University and was graduated in 1914 from the University of Oregon Medical School. Portland. He returned to Bend and practiced medicine there for over 50 years. Cause of death was metastatic adeno carcinoma of the liver.*

DR. JULES V. NAPIER, *Portland, died March 17 at the age of 46. He was born in St. Maries, Idaho. He was graduated from the University of Oregon Medical School, Portland, in 1956, where he served his internship and residency. Cause of death was apparent traumatic chest injuries, due to an automobile accident.*

DR. THOMAS A. DAVIS, *64, Portland, died March 13. He was born in Tualatin Plains, Ore., was a graduate of Reed College and the University of Oregon Medical School. During World War II he served in the Army Medical Corps as a colonel. He began practicing urology in Portland in 1947. Cause of death was acute pulmonary edema due to arteriosclerotic heart disease.*

DR. ROY A. HARCOURT, *Portland, died March 8. He was 75. Dr. Harcourt was graduated from Northwestern University Medical School, Chicago, in 1926. He was retired at the time of his death. Cause of death was cardiac arrhythmia due to acute myocardial infarction.*

DR. FREDERICK S. SALISBURY, *74, died March 8. He had lived in Portland for 17 years. Dr. Salisbury was a 1917 graduate of the University of Nebraska College of Medicine, Omaha. He was a diplomate of the American Board of Psychiatry and Neurology. Dr. Salisbury was retired. Cause of death was severe emphysema.*


Like a Red Hot wire

the Searing *Pain* of Inflammatory Neuritis

PROTAMIDE®

colloidal solution
of denatured
proteolytic enzyme

provides the *selective* fast-acting relief . . .

Repeatedly in published clinical studies,[1-10] investigators stress the following therapeutic characteristics:

- relief of inflammatory pain (non-traumatic) is prompt—particularly when administered early.[1-4]
- disability time is shortened from weeks to days.[7]
- so specifically effective is Protamide that a positive response is diagnostic of inflammatory neuritis.[3,4]
- prompt relief is observed even in ophthalmic herpes zoster.[5,6]
- incidence of sequelae such as postherpetic neuralgia is reduced.[1-4]
- consistently described as the therapy of choice.[1,3-6]

Administration:

In neuritis and herpes zoster, one ampul I.M. daily for 2 to 5 days usually relieves pain completely in patients treated early. Well tolerated.[1-10] However, inadvertent intravenous administration may cause anaphylactoid reaction.

—Boxes of 10 ampuls, 1.3 cc. each.—

References: (1) Baker, A. G.: Penn. Med. J. *63*:697-698 (May) 1960. (2) Smith, R. T.: New York Med. 8:16-19 (Aug. 20) 1952. (3) Smith, R. T.: Med. Clin. N. America (March) 1957. (4) Lehrer, H. W.; Lehrer, H. G., and Lehrer, D. R.: Northw. Med. *54*:1249-1252 (Nov.) 1955. (5) Sforzolini, G. S.: Arch Ophthal. *62*-381-385 (Sept.) 1959. (6) Shupala, E.: W. Virginia Med. J. *56*:191-193 (June) 1960. (7) Xander, G. W.: Western Med. *1*:14-17 (Sept.) 1960. (8) Combs, F. C., and Canizares, O.: New York J. Med. (Mar. 15) 1952, pp. 706-708. (9) Marsh, W. C.: U.S. Armed Forces Med. J. *1*:1045 (Sept.) 1950. (10) Love, T. R.: Rocky Mountain Med. J. *50*:873 (Nov.) 1953.

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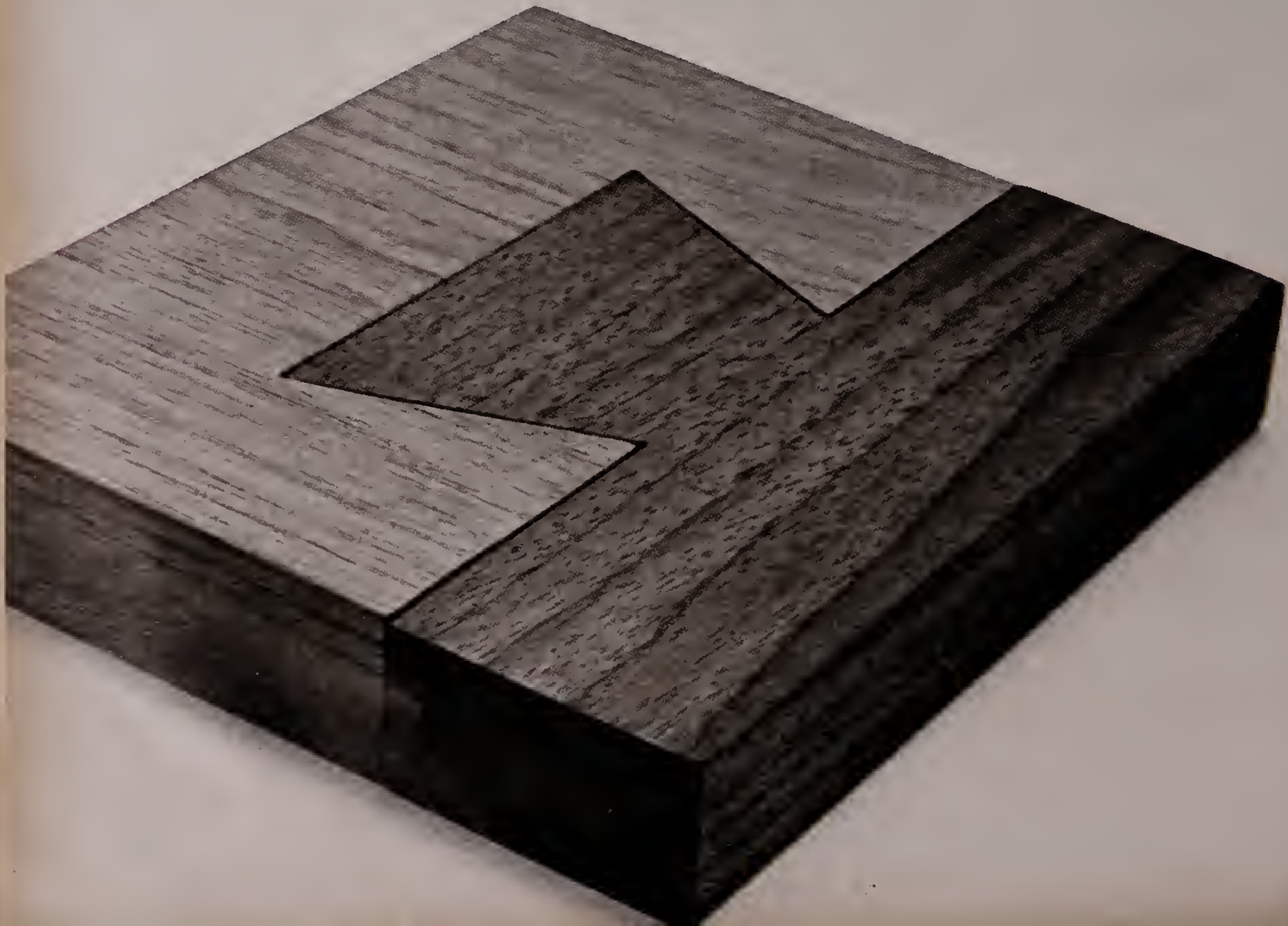
even better together
in mild hypertension
Serpasil®-Esidrix®
(reserpine and hydrochlorothiazide CIBA)
Combination Tablets



Serpasil-Esidrix combines reserpine (the original, and most widely used, rauwolfia alkaloid developed by CIBA) with hydrochlorothiazide (the most widely used oral diuretic, also a product of CIBA research).

even better blood pressure reduction—because 2 antihypertensive agents of choice often work better together

One drug potentiates the antihypertensive action of the other. Blood pressure is generally controlled with relatively low dosages of each component, often resulting in minimized side effects.

Although each component alone may provide adequate therapy in many cases of mild hypertension, the combination offers advantages which cannot be achieved with single-drug therapy.

even more patient benefits—because complementary actions of 2 antihypertensive agents extend the range of advantages

Reserpine, in addition to lowering blood pressure, provides central calming action to help relieve anxiety and tension; provides bradycrotic action to slow the rapid heart.

Hydrochlorothiazide, in addition to lowering blood pressure, relieves edema; permits relaxation of salt restriction.

The combination provides medication in one tablet instead of two; one prescription instead of two—encourages patient adherence to the regimen, offers economy.

for your next patient with mild hypertension

Rx Serpasil-Esidrix

Combination Tablets

Please see following page for prescribing information.

Serpasil®-Esidrix®
(reserpine and hydrochlorothiazide CIBA)
Combination Tablets

INDICATIONS: Mild to moderate hypertension, especially when complicated by anxiety, tachycardia, or edema.

SIDE EFFECTS AND PRECAUTIONARY MEASURES

Serpasil® (reserpine CIBA)
Occasional side effects: lassitude, drowsiness, nasal congestion, looseness of stools, increased frequency of defecation. Rare side effects: anorexia, headache, bizarre dreams, nausea, dizziness, skin rash.

Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg daily. When the drug is discontinued, depression usually disappears, but hospitalization and shock therapy are sometimes required.

Caution: Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to prevent or reverse hypotension and/or bradycardia.

Because reserpine may increase gastric secretion of hydrochloric acid, use cautiously in patients with peptic ulcer.

Use cautiously with digitalis, quinidine, or guanethidine. Not recommended for aortic insufficiency.

Esidrix® (hydrochlorothiazide CIBA)
Contraindictions: Oliguria, renal shutdown, progressive hepatic disease, and allergy to thiazides.

Warnings: Stenosis, hemorrhage, and ulceration of the small bowel have occurred with coated potassium tablets. Discontinue such medication when used with Esidrix if gastrointestinal disturbances arise.

Pay special attention to electrolyte balance of patients with severe renal or hepatic insufficiency. In patients with cirrhosis and ascites, watch for symptoms of impending hepatic coma. Thiazides may decrease glucose tolerance; use cautiously in diabetics. Hyperuricemia may occur but is readily reversed by a uricosuric agent. Lowering of blood pressure may sometimes result in nitrogen retention, particularly in patients with impaired renal function. Dosage titration is necessary in such patients.

Precautions: Watch for signs of fluid or electrolyte imbalance. Further electrolyte depletion may cause hypochloremic alkalosis and hypokalemia. Since the latter may precipitate digitalis intoxication, watch carefully patients who are taking digitalis or its glycosides or those with cardiac arrhythmias. In severe hypokalemia, large oral or intravenous doses of potassium may be required.

A few infants born of mothers who received thiazides during pregnancy have shown bone marrow depression with thrombocytopenia. Hydrochlorothiazide decreases responsiveness to exogenous norepinephrine and increases responsiveness to tubocurarine. Hypotensive episodes under anesthesia have been observed in some patients receiving thiazides.

Side Effects: In addition to those above, nausea, anorexia, headache, restlessness, constipation, dizziness, paresthesias, fatigue, increased sweating, cramps in arms and legs, diarrhea, abdominal pain. Rare reactions: purpura with or without thrombocytopenia, skin rash, photosensitivity, urticaria. Sometimes associated with hydrochlorothiazide: leukopenia, agranulocytosis, aplastic anemia, pancreatitis, jaundice, necrotizing vasculitis.

DOSAGE
Average dosage is 2 *Tablets #2* daily. For patients requiring less hydrochlorothiazide, substitute *Tablets #1*. For maintenance, reduce dosage to lowest effective level. When necessary, more potent antihypertensive agents may be added gradually in reduced dosages.

SUPPLIED
Tablets #2 (light orange), each containing 0.1 mg reserpine and 50 mg hydrochlorothiazide; bottles of 100 and 1000. *Tablets #1* (light orange), each containing 0.1 mg reserpine and 25 mg hydrochlorothiazide; bottles of 100 and 1000.

Consult complete literature before prescribing.

CIBA Pharmaceutical Company, Summit, N. J. C I B A

2/3595

WASHINGTON

Washington State Medical Association—444 RAVENNA BLVD. N.E., Seattle, Washington 98115

PRESIDENT *Lucius D. Hill III, M.D., Seattle*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual Meeting, Sept. 10-13, Seattle

Dr. McCarthy Receives Award

BRIAN J. McCARTHY, Ph.D.

Brian J. McCarthy, professor of Microbiology and Genetics at the University of Washington, has been named recipient of the 1967 Eli Lilly and Company Award in Microbiology and Immunology.

The award was presented to Dr. McCarthy April 30 at the annual meeting of the American Society for Microbiology in New York. He was selected "in recognition of his important contribution to the knowledge of the synthesis, chemical properties, and biological functions of nucleic acids."

The award was established by Eli Lilly and Company in 1936 and consists of a medal and $1,000.

Two Courses Scheduled for July

Continuing Medical Education courses on "Practical Psychiatry/Child Psychiatry" will be offered at the University of Washington School of Medicine July 24-28.

The purpose of the three-day course in Practical Psychiatry is to present some of the current concepts concerning psychiatric illness and its treatment. Lectures, seminars, and demonstrations of patients will illustrate psychoneurotic, psychosomatic, and psychotic problems commonly encountered in everyday office practice.

The course in Child Psychiatry will give some theoretical orientation but will emphasize the practical aspects of prevention of emotional disorders in children, acute crisis problems, family therapy, and the use of drugs.

A tuition fee of $45 will be charged for the Practical Psychiatry course and $30 for the Child Psychiatry course. Attendance for the Practical Psychiatry course is limited to 25; registration for the Child Psychiatry course is unlimited. Both courses will be acceptable for credit by the American Academy of General Practice.

OBITUARIES

DR. FRANK L. WILLIAMS, SR., *Tacoma, died March 17. He was 83 and had been retired for several years. Before moving to Tacoma 21 years ago, Dr. Williams had been Chief of Surgery at the Veterans Administration Hospital in Wadsworth, Kansas. He was graduated from Rush Medical College in 1911. Cause of death was acute myocardial infarction due to arteriosclerotic heart disease.*

DR. EMORY J. BOURDEAU, *Mercer Island, died March 19, at the age of 60. He was born at Campbell, Neb., and attended the University of Montana and Creighton University School of Medicine, Omaha, where he was graduated in 1934. He was chief of staff at*

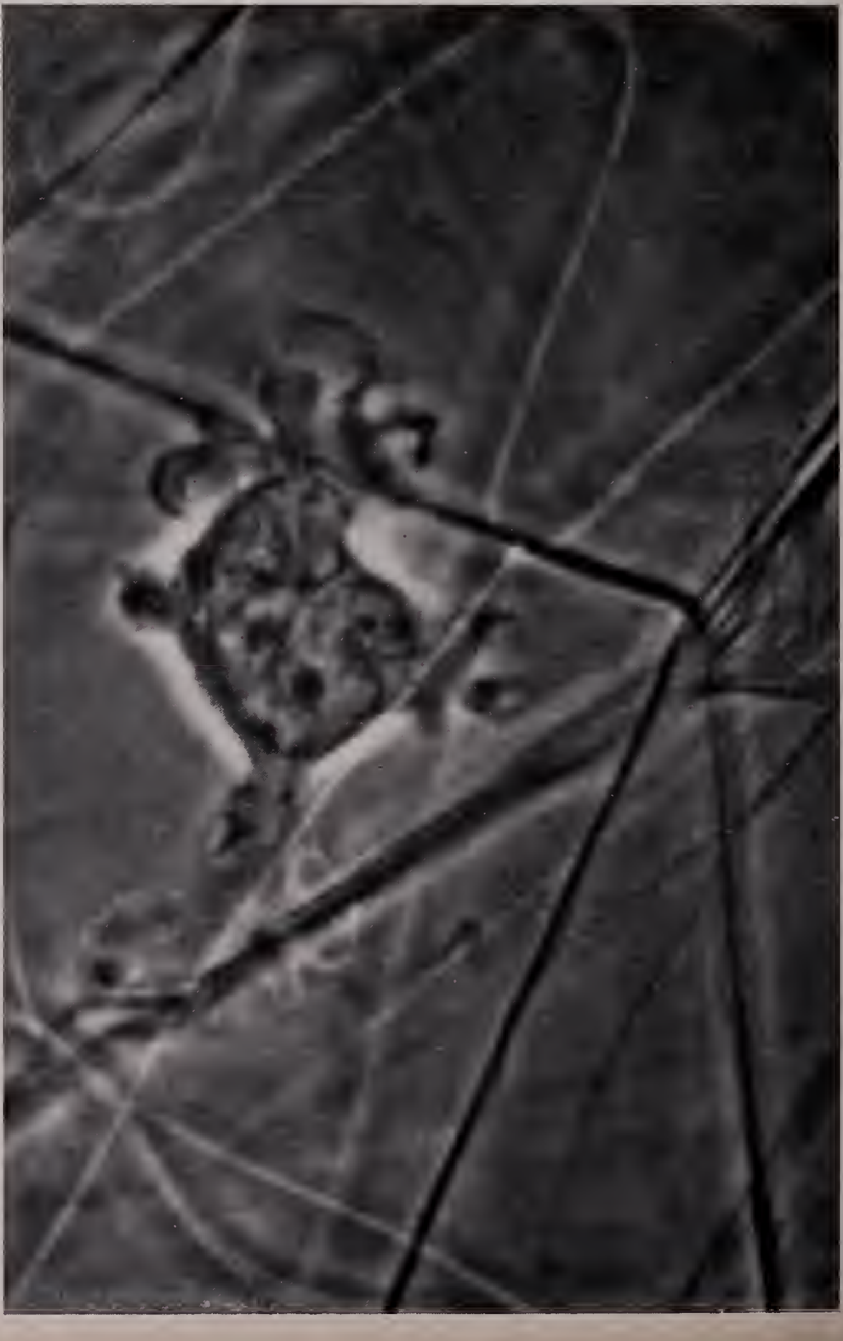
continued on page 584

INFLAMMATION: A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

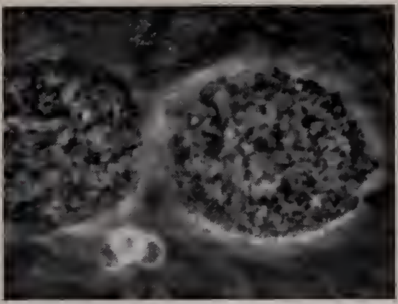


Visual evidence of how corticosteroids influence the inflammatory reaction

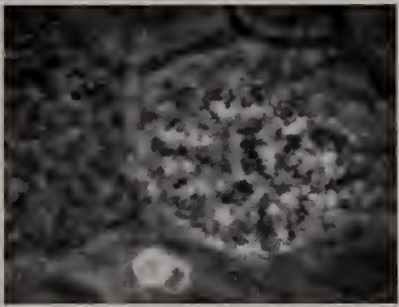
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



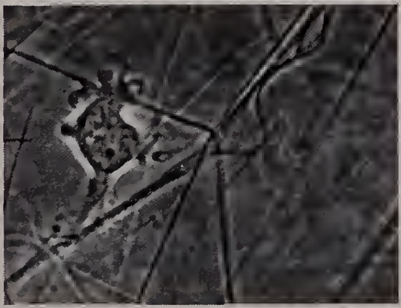
Phase-contrast microscopy showing mast cell before injury.



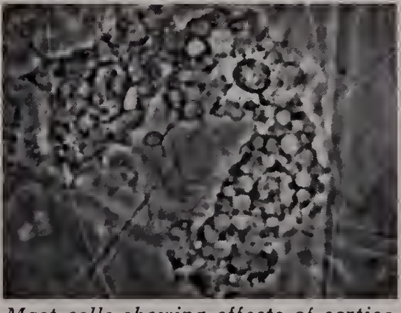
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

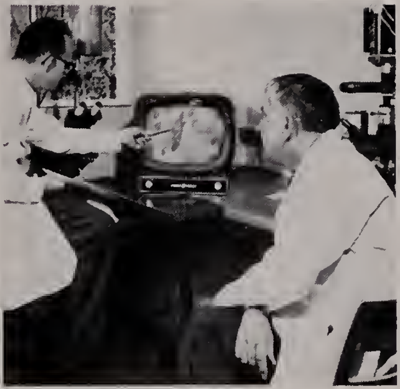
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid — Synalar (fluocinolone acetonide) — the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



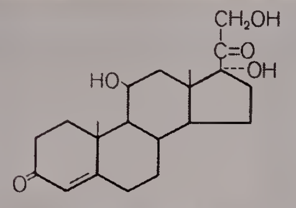
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses*, a film based on this study, is now available from your Syntex representative.

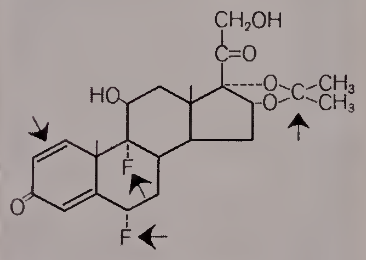
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

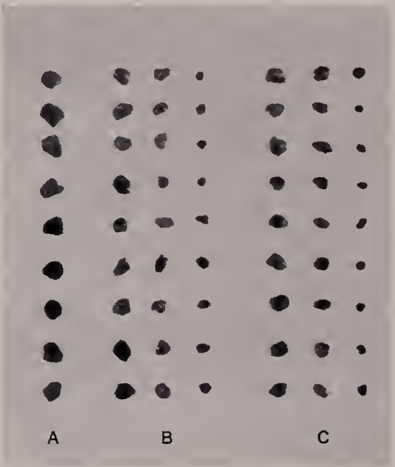


Fluocinolone Acetonide (Synalar)

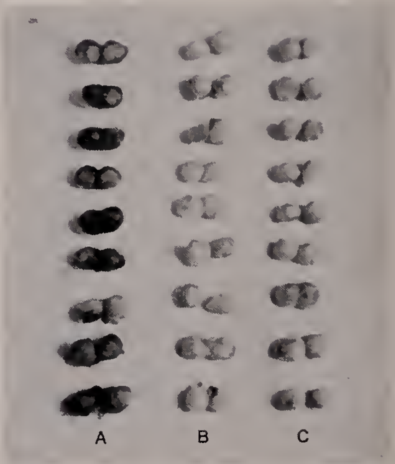
- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at* both *the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes.

CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from
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LABORATORIES INC., PALO ALTO, CALIF.

For inflammatory dermatoses... by any measure a topical corticosteroid of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

Results often comparable to those of systemic corticosteroids with fewer hazards

continued from page 579

Seattle General Hospital in 1958 and was a member of the hospital's board of trustees. Cause of death was carcinoma of the prostate with bone, liver and brain metastases.

DR. MILTON PETER GRAHAM, 77, Aberdeen, died March 1. He had practiced in Aberdeen 48 years. Born at Lindsay, Ontario, Canada. As a child he moved to North Dakota. He graduated from the University of North Dakota and Rush Medical College, Chicago, in 1915. He interned at Cincinnati General Hospital and practiced for two years at Carrington before entering the service where he served as a captain with Ambulance Co. 161, AEF. After the war he settled in Aberdeen. He was still practicing when he died. Cause of death was coronary occlusion due to coronary artery disease.

DR. WILLIAM NORMAN POWERS, of Granite Falls, Snohomish County, died Feb. 6. He was 93. Dr. Powers was graduated from Cooper Medical College, San Francisco, 1897. Cause of death was congestive heart failure due to cardiac arrhythmia and coronary artery disease.

DR. HOWARD C. EDDY, 62, Mercer Island, died Jan. 16. He was graduated in 1929 from Western Reserve University School of Medicine, Cleveland. He practiced medicine in Cleveland from 1930 until 1941. During World War II, Dr. Eddy was a colonel in the Army Medical Corps. He was division surgeon for the 6th Armored Division, commander of the 342nd Medical Group and port surgeon for the Seattle Port of Embarkation. He moved to Mercer Island in 1946 after a year in Seattle and practiced there until his death. He had been semi-retired for the past year. Cause of death was congestive heart failure due to coronary artery disease.

DR. JESSE D. ROBUCK, Seattle, died Feb. 15. He was 49. Dr. Robuck was born in Merino, Colo. He was graduated from Seattle University and in 1948 from the University of Oregon Medical School. After graduation he took his internship at the Doctors Hospital and served a surgical residency there. At the time of the Korean War he served in the Allied Forces Hospital in Trieste as assistant chief of surgery. Following discharge he entered general practice in Ballard, and in 1954 founded the Greenlake Medical Center. He served as Chief of Staff at Doctors Hospital in 1962 and as chairman of the General Practice Committee of Doctors Hospital in 1961. He was a member of the American Academy of General Practice. Cause of death was pneumonia due to chronic lymphocytic leukemia.

Shadel Hospital

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The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

APPROVED BY THE AMERICAN MEDICAL ASSOCIATION

MEMBER OF THE AMERICAN HOSPITAL ASSOCIATION

PRESIDENT'S page

The Time to Speak

LUCIUS D. HILL, III, M.D.

Today, the majority of citizens of the United States regard health care as a birthright. At the recent meeting of the American Society of Internal Medicine in San Francisco, representatives of labor, management and the insurance industries agreed on this point. The physician audience was polled and it was interesting that even the majority of physicians agreed that health care is a birthright. The acceptance of this philosophy is bringing about an enormous increase in the demand for health services, not only for acute care, but for preventative medical care as well. This increase in demand for health services has prompted government to enter into large areas to provide medical care for those over 65, for those on welfare and other citizens previously unable to obtain medical services. These individuals have been promised first-class, comprehensive medical care. These programs, financed by the government, have been set up in direct competition with the private sector. If these programs are successful, it will be difficult to halt government intervention into what remains of private medicine. It is mandatory that the medical profession, working with all other agencies, including the insurance industry and the bureaus, do everything possible to strengthen the private sector of medicine so that the need and desire for further government intervention will be averted. This plainly requires delivery of comprehensive, first-class medical care for all those seeking such care from the private sector. Anything less than this will inevitably bring further government intervention. The job of the private sector, therefore, is clearly laid out— we must solve the problems of economic barriers and maldistribution in the delivery of medical care. In working toward these goals, the WSMA has been working with bureaus and the commercial carriers to solve the socio-economic problems. In addition, we have been working with the government in those areas where it has become clear that government is the only agency capable of providing services. We have offered legislative advisory committees to all of our representatives in the Congress. These committees consist of knowledgeable people within the Association, along with personal friends of the congressmen. These committees were set up with the hope that, through them, the physician will have a voice in molding proposed legislation before it becomes law. Since setting these committees up, we have been consulted by both representatives and senators on such important legislation as the revision of Medicare, mental health, and financial assistance to needy hospitals. The way we have responded to these bills is exemplified by our analysis of Senate Bill 859, sent to us by Sen. Warren G. Magnuson. The bill is entitled the "Hospital Emergency Assistance Act of 1967" and will assist those hospitals in critical need of upgrading their facilities to meet the needs of their communities. We sent copies of this bill to each member of the Executive Committee of the State Association, to a number of physicians who are knowledgeable about hospital needs and to the Hospital Facilities and Planning Board. From these individuals we obtained very thoughtful and constructive analyses of the measure. There were points of disagreement and points in support of the legislation. We forwarded our analysis to Sen. Magnuson and his response follows:

> Dear Dr. Hill:
>
> I would like to thank you and the other physicians who assisted in the review of S.859 for the detailed commentary that you have provided me on the bill.

> I have already conveyed your comments to Senator Lister Hill, chairman of the Senate Committee on Labor and Public Welfare which will give consideration to this bill. In addition, I have urged Senator Hill to begin immediate hearings on this legislation with the hope of early enactment by the 90th Congress. I have also contacted Dr. Bernard Bucove, State Director of Health, Olympia, as you suggested in regard to procuring the estimated costs figures on hospital needs in the State of Washington.
>
> Again let me thank you for the effort which you and your fellow physicians have put into the analysis of S.859. In order to prepare my views on a number of other health related measures, I have enclosed, for your information, bills on alcoholism and community health facilities. Any comments which you might have on these would also be appreciated.
>
> I will keep you posted on the progress of S.859.
>
> Sincerely yours,
> WARREN G. MAGNUSON, U.S.S.

There are those who still believe that conversing with the government is unwise. It is this blind negativism that has led to complete socialization in every other country in the world. Legislation will pass Congress to meet the needs for health care, with or without the physician's advice. If the physician is to mold legislation with constructive ideas, he must do so before the proposed legislation has become law. It is our firm belief that our legislative liaison committee offers the membership an opportunity to submit constructive suggestions to our representatives in order that the advice and knowledge of medicine might be imparted to national legislation. Sen. Magnuson, as chairman of the Commerce Committee, is responsible for much of the legislation dealing with health that comes before the Senate. Rep. Brock Adams, who sits on the Commerce Committee in the House of Representatives, likewise reviews much of the health legislation. Through our legislative advisory committees, a dialogue with these gentlemen, in my humble opinion, can only serve to make our criticisms and constructive suggestions felt on a national level. It is inconceivable that health legislation should be passed without the voice of the physician, but, in the past, the physician has too often been unwilling to lend his brainpower and imagination to impending legislation. It is hoped that this liaison will be long-standing and productive. Through this communciation, we can make known our sincere interest in providing medical care to all citizens without dissolving the private sector of medicine. ■

Lucius Hill M.D.

LIFESAVING BRACELETS

More than 170,000 Americans have their lives protected by this bracelet. The nonprofit Medic Alert Foundation of Turlock, California, provides the signaling device for the one person in five who have a special or "hidden" medical problem. The American Medical Association estimates that forty million Americans should be wearing some sort of medical warning device. One side of the emblem has the words "Medic Alert" and the staff of Aesculapius to warn emergency personnel that a special medical problem exists. On the back is engraved the member's medical problem, such as "Diabetes," "Allergic to penicillin," et cetera. A 24-hour a day collect telephone number and an individual serial number also engraved on each emblem provides an additional link with life for the member. A one-time basic fee of $5.00 is charged.

Applications forms or additional information may be secured by writing to:

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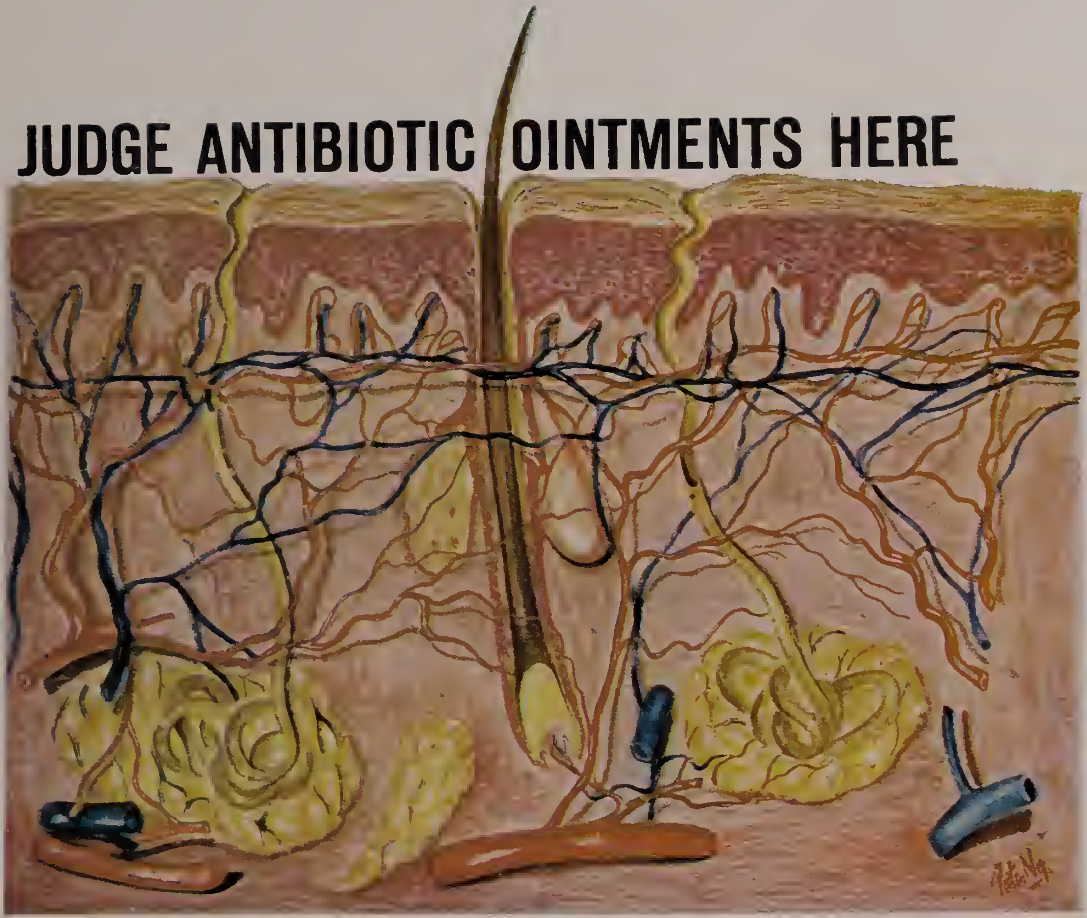

Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B – bacitracin – neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

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Annual Meeting, June 28-July 1, Sun Valley

Dr. Earle Elected

A. Scott Earle, Sun Valley, was elected to the Blue Cross of Idaho Board of Directors April 14, 1967, at the annual meeting of the board. Other medical members are C. Clifford Johnson, Boise; William P. Marineau, Moscow, and Ralph G. Goates, Blackfoot.

State Board of Medicine Section

Gov. Don Samuelson has announced the appointment of James A. Newton, Lewiston, and G. Curtis Waid, Idaho Falls, as members of the Idaho State Board of Medicine for six-year terms.

Dr. Newton completed an unexpired term of C. I. Gibbon, Kellogg, deceased, and Dr. Waid succeeds John E. Comstock of Pocatello, who served a six-year term.

Other members of the Board are Charles A. Terhune, Burley; Charles E. Kerrick, Caldwell; Orland B. Scott, Kellogg, and Robert E. Lloyd, Boise.

The Board granted temporary licenses to the following physicians: Harold R. Thysell, Coeur d'Alene (June 15). Graduate, University of Minnesota Medical School, June, 1952. Internship Ancker Hospital, St. Paul, 1952. General Practice in Crookston, Minn., July, 1952, to present. Granted TL-384 April 14, 1967. General Practice.

William G. Moore, Coeur d'Alene (July 1). Graduate, Northwestern University Medical School, June 1961. Internship, Cook County Hospital, Chicago, June, 1962. Residency, Wesley Memorial Hospital, 1962-63, Cook County Hospital, Chicago, 1963-66, Children's Hospital, St. Petersburg, Florida, 1966-67. Granted TL-385 April 17, 1967. Orthopedic Surgery.

Edward Louis Boas, Moscow. Graduate, George Washington University School of Medicine, Washington, D.C., June, 1964. Internship, Swedish Hospital, Seattle, June, 1965. Assistant Resident, surgery, Swedish Hospital, 1965-66; Assistant Resident, radiology, Virginia Mason Hospital, Seattle, 1966-67. Granted TL-386 April 18, 1967.

Twenty-first Anniversary Marked

The North Idaho District Medical Service Bureau, Inc., marked its 21st anniversary recently at the annual meeting in Lewiston. New Officers elected were President Donald D. McRoberts, Lewiston, Vice-president Philip D. Spechko, Genesee; Secretary-Treasurer Robert L. Olson, Lewiston.

Board members are O. V. Baumann, Lewiston; H. E. Bonebrake, Kellogg, and James S. Newton, Lewiston, outgoing President. Retiring from the board were Roland D. Brooks, Moscow, and James H. Bauman, Lewiston.

Dr. Newton reported the bureau has 41,000 subscribers, 120 member physicians, and 28 full-time employees.

New Members for Component Societies

The following physicians have been elected to membership in Component Societies:

Ada County Medical Society: Loren D. Blickenstaff, Dean E. Call, John H. Gordon, and Delbert E. Scott, all of Boise.

Bonner-Boundary Medical Society: Harold E. Dittemore, Sandpoint.

Kootenai-Benewah Medical Society: Robert H. Young, Couer d'Alene.

Shoshone County Medical Society: Ronald K. Panke, Kellogg.

North Idaho District Medical Society: Richard D. Thorson, Lewiston.

Southwestern Idaho District Medical Society: Donald R. Barnes, Nampa.

Duties of Nurses Discussed

The Joint Commission of the Idaho Medical Association and the Idaho State Nurses Association met in Boise recently to consider problems concerning duties to which nurses may properly be assigned. Representing the association were Joseph W. Marshall, Twin Falls, chairman; David M. Barton, Boise, and Mr. Armand Bird, Executive Secretary, Idaho Medical Association.

Blood Not Wasted

A recent news story saying there was waste of blood collected from donors in the United States because it is not used fast enough was termed "entirely misleading with completely false statements" by E. F. Sestero, Boise, Director of the Boise Regional Blood Center of the American National Red Cross. Dr. Sestero said that there is no wasted blood at the center. Outdated blood is used in the preparation of blood components or plasma fractions.

Dr. Sestero reported that of 21,327 pints distributed to hospitals in 1966, 78 per cent were transfused as whole blood and 22 per cent were outdated and used for plasma fractionation.

REVIEW

Pancreatitis

By T. T. WHITE, M.D., Williams & Wilkins, Baltimore, Maryland, 214 pp., 90 illustrations, 10 tables, $15, 1966.

In this book Dr. White has presented a detailed study of one of the most difficult problems in medicine. Pancreatitis, whether acute or chronic, poses many unsolved problems. For these reasons it is especially gratifying to find in one volume the results of Dr. White's extensive interest in this field. There is excellent discussion of the clinical picture, diagnostic measures and therapeutic weapons in dealing with these controversial matters. The book is attractively printed and published and is noticeably free from error.

G. M. BOGARDUS, M.D.

X-Ray of the Month on Page 571

Intramural Lipoma of the Esophagus. Although statistically this is a very rare entity, the diagnosis can be strongly suggested by careful evaluation of the films.

Note the extremely sharp smooth margin of the lesion and especially its change in shape between the two x-ray exposures.

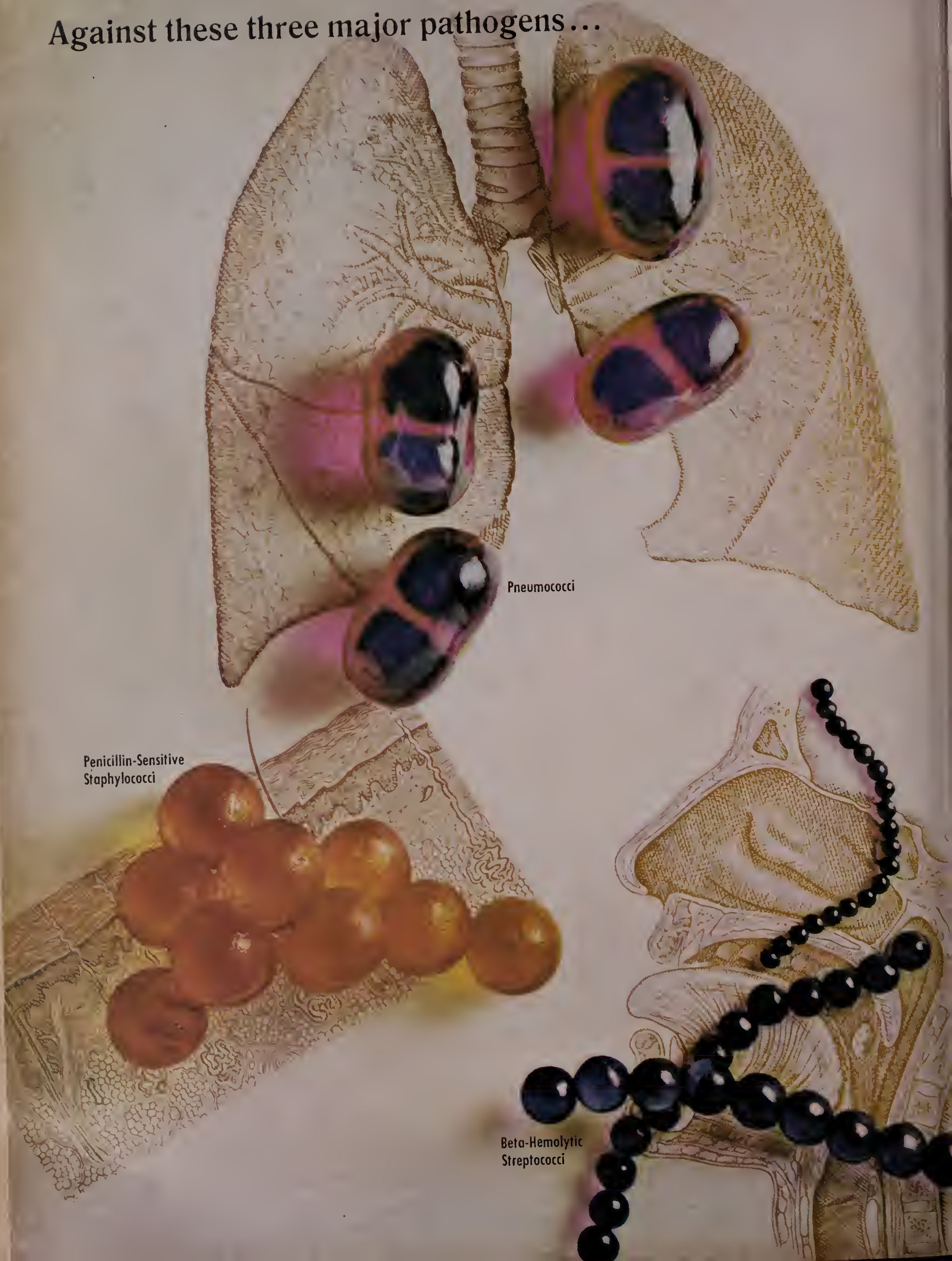
By far the most frequent mass lesion of the esophagus is carcinoma. In its early stages it may be polypoid in character, but mucosa is involved and the surface of the defect is irregular or nodular.

In this case, the mucosa is intact and the appearance is that of a benign extramucosal lesion.

A pressure deformity caused by an extrinsic mass is more likely to have a smooth concave junction between the defect and the esophageal wall as opposed to the sharp angled margin here.

This then is an intramural, extramucosal tumor. The most definite finding is its pliable consistency, with contour and configuration altered by peristalsis. This so-called "squeeze sign" is almost pathognomonic for lipoma, and does not occur with other benign tumors (notably the much more frequent leiomyoma and polyp).

Against these three major pathogens…


Pneumococci
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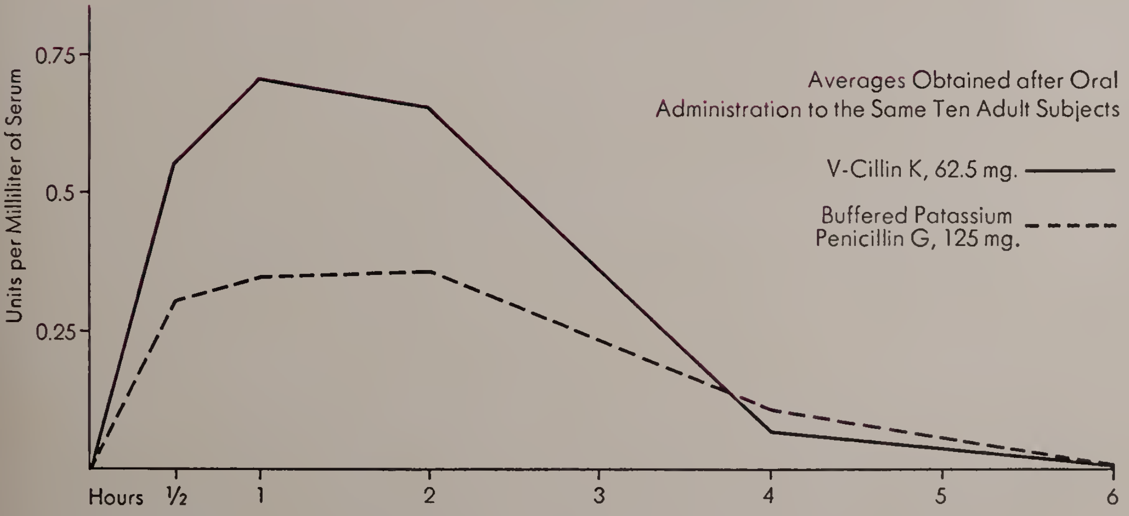
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Staph. Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Range	Streptococcus, Group A MIC (mcg./ml.) Median	Streptococcus, Group A MIC (mcg./ml.) Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Diplococcus Pneumoniae MIC (mcg./ml.) Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Block, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K® Lilly 700867

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses

Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Refractory infections generally respond to a second treatment three to four days following completion of the first. Treatment of gonorrhea with severe complications should be individualized, with prolonged and intensive treatment. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [032067]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

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We are happy to extend consultation on any of your problems relating to Alcoholism as a courtesy to the profession. Telephone at any hour. Illustrated literature on request.

MEDICAL STAFF

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Merle M. Kurtz, M.D.
Marvin J. Weinstein, M.D.
Norris H. Perkins, M.D.,

John W. Evans, M.D.,
Consulting Psychiatrist
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Belap soothes the spastic gut.
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Hypersecretion and smooth muscle spasm are the two components of visceral spasm. Belap treats both simultaneously with its combination of natural belladonna alkaloids for prompt anticholinergic action. Phenobarbital provides smooth central sedation. Belap safely and reliably relieves the pain and distress of visceral spasm in peptic ulcer, abdominal pain and cramps, pylorospasm, nausea of pregnancy, nervous indigestion and motion sickness.

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	No. 0	No. 1	No. 2
Phenobarbital (Warning, may be habit forming)	8 mg.	15 mg.	30 mg.
Belladonna Extract	8 mg.	8 mg.	8 mg.

One tablet three times daily. Available in bottles of 100 and 1000.

Use Belap Ty-Med tablets whenever timed-release medication for smooth, prolonged anticholinergic and sedative action is desired.

Belap Ty-Med* (Modified formula). Each tablet contains: Amobarbital (Warning, may be habit forming) 50 mg./Homatropine methylbromide 7.5 mg.

*Lemmon brand of timed-release medication.

One Ty-Med tablet morning and night. Available in bottles of 30 and 100 tablets. Observe the usual precautions for barbiturates and parasympatholytic compounds.

Caution: Federal law prohibits dispensing without prescription.

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PORTLAND,OREGON 97208

BOOKS

RECEIVED: The following books have been received Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

Surgery of rheumatoid arthritis. By Leonard Marmor, M.D., F.A.C.S., Associate Professor of Surgery/Orthopedics; U.C.L.A. School of Medicine, Los Angeles, Calif. 261 pp. Illustrated. Price $15. Lea & Febiger, Philadelphia, Penn. 1967.

The story of health. By Anne and Gerald Howat, Anne Howat, M.B., Ch.B., Medical Officer, St. Veronica Wing, Moulsford, Berkshire. Gerald Howat, M.A., B.Litt., F.R. Hist.S., Dip.Ed.; Head of History Dept., Culham College of Education, Oxon. 118 pp. Illustrated. Price $1—75. Pergamon Press, (England) US-Long Island City, New York. 1967.

German-English/English-German: A dictionary of professional terminology of speech pathology and audiology. By Peter B. Mueller, formerly Speech Pathology and Audiology, Auburn Univ., Auburn, Alabama. 53 pp. Price $5. Charles C Thomas, Springfield, Ill. 1967.

Differential Diagnosis. A memory stimulus system. By Stanley B. Berkowitz, M.D., Diplomate, Am. Board of Surgery, Adjunct in Surgery, Mt. Zion Hospital & Med. Center; Assoc. Attending St. Luke's Hospital; Courtesy Staff Surgeon, St. Joseph's Hospital, Franklin Hospital, Polyclinic Hospital, San Francisco. 333 pp. Price $11.50. Charles C Thomas, Springfield, Ill. 1967.

Headaches in children. By Arnold P. Friedman, M.D. and Ernest Harms, Ph.D. 151 pp. Illustrated. Friedman-Assoc. Clinical Professor of Neurology, College of Physicians & Surgeons, Columbia University, NYC. Harms—Editor of the journal, Adolescence. Price $8.75. Charles C Thomas, Springfield, Illinois. 1967.

The medical staff in the modern hospital. By C. Wesley Eisele, M.D. Assoc. Professor of Medicine, Assoc. Dean for Postgraduate Medical Education, Univ. of Colorado School of Medicine. 523 pp. Graphs & Drawings. Price $15.95. McGraw-Hill Book Co., New York. 1967.

Clinical Pathology. By Benjamin B. Wells, M.D., Ph.D., Asst. Chief Med. Director for Research & Education in Medicine, Veterans Administration, Dept. of Medicine & Surgery, Washington, D.C.; and James A. Halsted, M.D. Assoc. Chief of Staff for Research & Education, Veterans Admin. Hospital, Washington, D.C., Clinical Professor of Internation Health & Nutrition, The George Washington Univ. School of Medicine, Washington, D.C.. 708 pp. Price $11.50. Illustrated. W. B. Saunders Co., Philadelphia. 1967.

Hearts—their long follow-up. By Paul Dudley White, M.D., and Helen Donovan. 357 pp. Illustrated. Price $12. W. B. Saunders Co., Philadelphia. 1967.

CIBA foundation symposium: Principles of biomolecular organization. By G. W. W. Wolstenholme, O.B.E., M.A., F.R.C.P., F.I. Biol.; and Maeve O'Connor, B.A., 491 pp. Illustrated. Price $15. Little, Brown & Co., Boston, Mass. 1967.

CIBA foundation symposium: Ethics in medical progress. By G. E. W. Wolstenholme, O.B.E., M.A., F.R.C.P., F.I. Biol. and Maeve O'Connor, B.A. 257 pp. Price $11.75. Little, Brown & Co., Boston, Mass. 1967.

Radiology in World War II. Published under the direction of Lt. Gen. Leonard D. Heaton, The Surgeon General, U. S. Army, Washington, D.C. 1087 pp. Illustrated. Price $8.25 from Supt. of Documents, U. S. Govt. Printing Office, Washington, D. C. 1967.

Cowdry's arteriosclerosis (Second Edition): A survey of the problem. By Herman T. Blumenthal, Ph.D., M.D., Director, Clinical Research Program on Aging, Veterans Admin. Hospital, Jefferson Barracks; Gerontology Research associate, Dept. of Psychology, School of Graduate Studies, Washington University, St. Louis, Missouri. 855 pp. Illustrated. Price $48.50. Charles C Thomas, Springfield, Illinois. 1967.

Current therapy 1967. Edited By Howard F. Conn, M.D., Uniontown, Penna. 844 pp. Price $13. W. B. Saunders Co., Philadelphia, Penna.

One-hundred years of medical progress. By Leonard P. Wershub, M.D., F.A.C.S., F.I.C.S., Diplomate of Am. Board of Urology, Professor of Urology, Curator Medical Memorabilia New York Medical College. 259 pp. Illustrated. Price $6.50. Charles C Thomas, Springfield, Illinois. 1967.

Labor: Clinical evaluation & management. By Emanuel A. Friedman, M.D., Med. Sc. D., Chairman & Professor of Obstetrics & Gynecology, Chicago Medical School; Michael Reese Hospital & Medical Center. 397 pp. Price $13.50. Appleton-Century-Crofts, Div. of Meredith Pub. Co., New York. 1967.

Ulcers of the leg: Cause and treatment. By Charles V. Menendez, M.D., Asst. Professor of Clinical Surgery, Tulane University School of Medicine, New Orleans, La. 73 pp. Illustrated. Price $5.50. Charles C Thomas, Illinois. 1967.

The art of predictive medicine. By Webster L. Marxer, M.D., Director, Diagnostic Survey Dept., Beverly Hills Medical Clinic, Beverly Hills, Calif. 358 pp. (Charts & graphs) Price $15.75. Charles C Thomas, Springfield, Illinois. 1967.

Shock chemistry, physiology, and therapy. By William C. Shoemaker, M.D. Professor of Surgery, Chicago Med. School; Chief, third surgical service; Cook Co. Hospital; Research Career Awardee, National Heart Institute; Director, Dept. of Surgical Research, Hektoen Institute, Chicago. 306 pp. Price $11.50. Illustrated. Charles C Thomas, Springfield, Illinois. 1967.

Law for the physician. By Carl Erwin Wasmuth, M.D., LL.B., F.A.C.A., F.C.L.M. Staff, The Cleveland Clinic Foundation; Assoc. Professor of Law, Cleveland-Marshall Law School of Baldwin Wallace College, Cleveland, Ohio. 583 pp. Price $16.50. Lea & Febiger, Philadelphia. 1966.

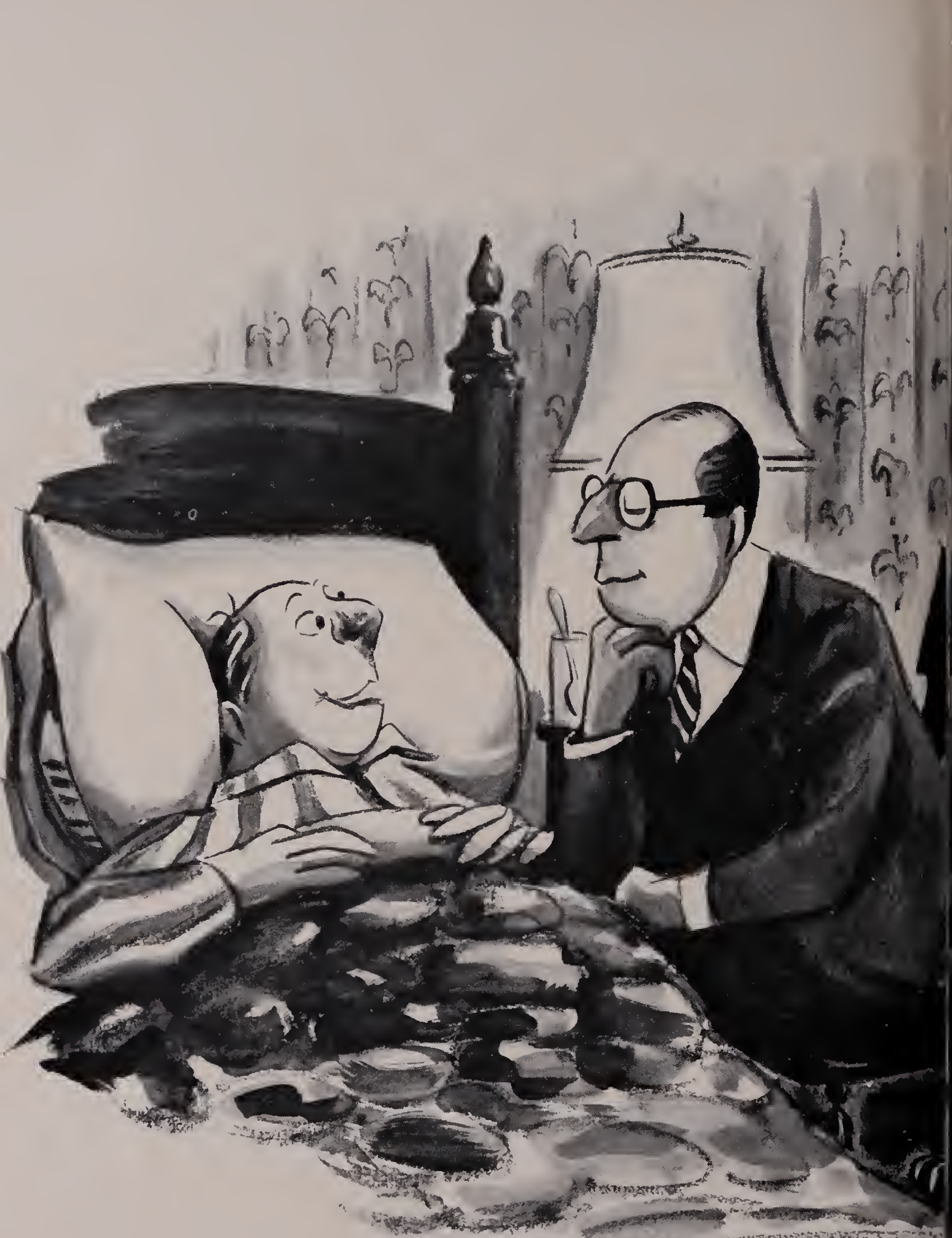
CIBA—Egg Implantation. Edited by G.E.W. Wolstenholme, O.B.E., M.A., F.R.C.P., F.I. Biol. and Maeve O'Connor, B.A. 112 pp. Price $3.50. Little, Brown & Co., Boston. (Illustrated) 1967.

CIBA—Histones: their role in the transfer of genetic information. Edited by G. E. W. Wolstenholme, O.B.E., M.A., F.R.C.P., F.I. Biol., and Maeve O'Connor, B.A. 115 pp. (graphs & charts) Price $3.50. Little, Brown & Co., Boston. 1966.

CIBA—Touch, heat and pain. Edited by A. V. S. deReuck, M. Sec., D.I.C., A.R.C.S., and Julie Knight, B.A. 389 pp. Illustrated. Price $14. Little, Brown & Co., Boston. 1966.

CIBA—The thymus: experimental and clinical studies. Edited by G. E. W. Wolstenholme, O.B.E., M.A., F.R.C.P., F.I. Biol. and Ruth Porter, M.R.C.P. 538 pp. Illustrated. Price $15.00. Little, Brown & Co., Boston. 1966.

Congenital idiopathic talipes. By James L. LeNoir, III, M.D., Formerly Instructor of Orthopedic Surgery, La. State University Medical School; Member of Orthopedic Dept., Southern Baptist Hospital, New Orleans, La. 354 pp. Illustrated. Price $20.50. Charles C Thomas, Springfield, Illinois. 1966.



"When I couldn't even smell corned beef and cabbage, I decided it was time for you, Doc."

Maybe he doesn't know when he's well off. But you might want to prescribe long-acting Novahistine LP anyway.

Two tablets in the morning and two in the evening will usually provide day and night relief by helping to clear congested air passages for normal, free breathing. Novahistine LP is formulated to provide continuous therapeutic effect for 8 to 12 hours. The decongestant ingredients help restore normal mucus secretion and ciliary activity—physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

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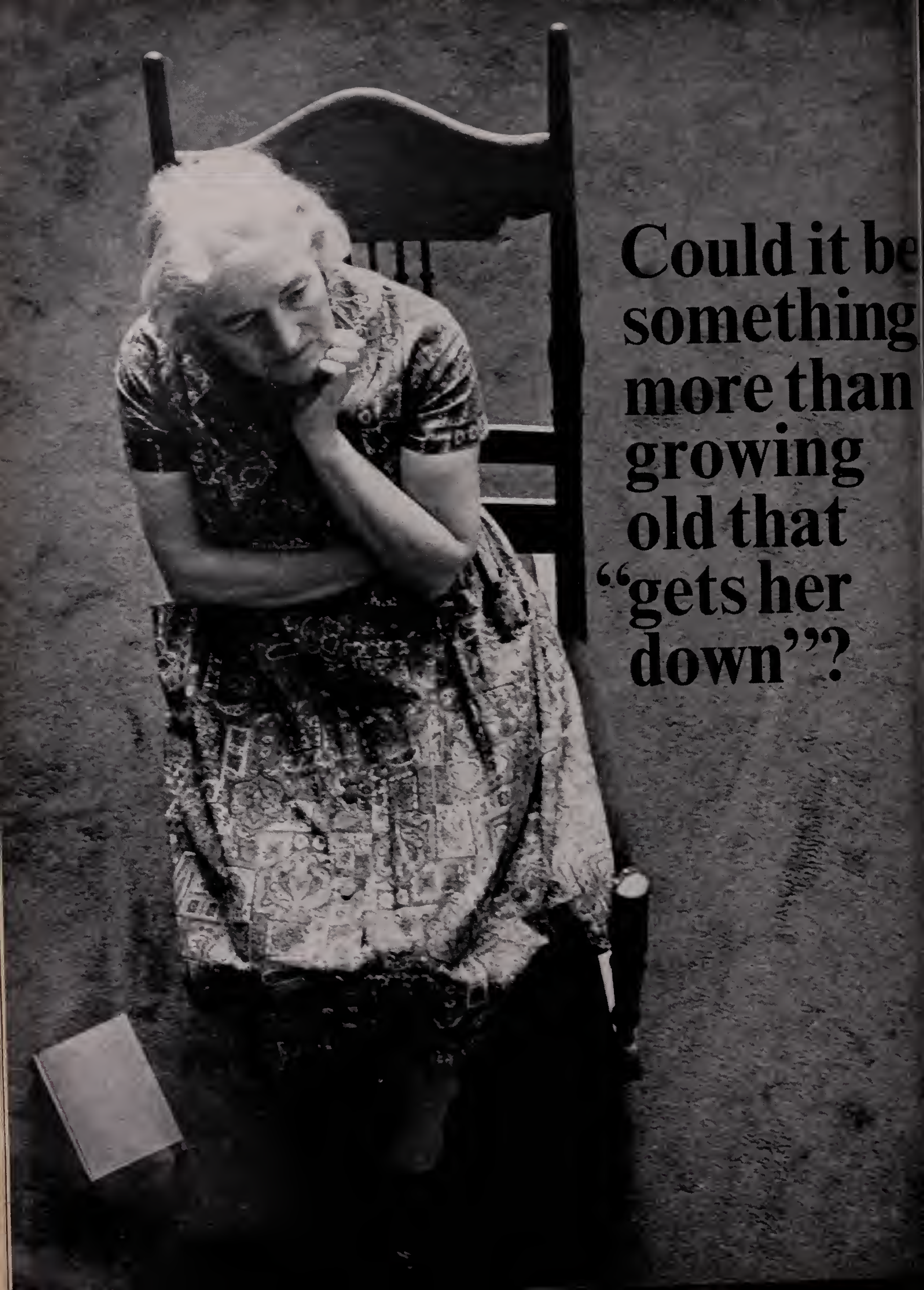
Could it be something more than growing old that "gets her down"?

Mild mood depression, poor appetite, little interest in the present or future. Does this picture mean that she's giving in to functional fatigue?

When functional fatigue is part of her problem, Alertonic can help counteract accompanying apathy and inertia. It helps lift mood, stimulate appetite, and establish new interest in daily life.

Pleasant-tasting Alertonic combines pipradrol hydrochloride—a gentle cerebral stimulant—with an excellent vitamin and mineral formula, in a satisfying 15% alcohol vehicle.

Especially in the aging patient, nothing fosters confidence and a sense of well-being better than your own personal warmth, understanding, and encouragement. Between visits, however, your prescription for Alertonic can help keep your patient from giving in to functional fatigue.

Adequate dosage is important: Prescribe Alertonic—one tablespoonful t.i.d., 30 minutes before meals ...tastes best chilled.

And for your patient's sake, prescribe Alertonic in the convenient, economical one-pint bottle.

Available only on prescription

Alertonic®

Each 45 cc. (3 tablespoonfuls) contains: alcohol, 15%, pipradrol hydrochloride, 2 mg.; thiamine hydrochloride (vitamin B_1) (10 MDR*), 10 mg.; riboflavin (vitamin B_2) (4 MDR), 5 mg.; pyridoxine hydrochloride (vitamin B_6), 1 mg.; niacinamide (5 MDR), 50 mg.; choline,† 100 mg.; inositol,† 100 mg.; calcium glycerophosphate, 100 mg. (supplies 2% MDR for calcium and for phosphorus) and 1 mg. each of the following: cobalt (as chloride), manganese (as sulfate), magnesium (as acetate), zinc (as acetate), and molybdenum (as ammonium molybdate).

*Multiple of adult Minimum Daily Requirement supplied.
†The need for these substances in human nutrition has not been established.

Indications: 1. Functional fatigue such as that often associated with: a depressing experience or stressful time of life; advancing years; convalescence; limited activity or confinement. 2. Poor appetite and vitamin-mineral deficiency as they occur in: patients having faulty eating habits; geriatric patients who are losing interest in food; patients convalescing from debilitating illness or surgery.

Contraindications: As with other drugs with CNS stimulating action, Alertonic is contraindicated in hyperactive, agitated or severely anxious patients and in chorea or obsessive compulsive states.

Side effects: Reports of overstimulation have been rare. Patients who are known to be unduly sensitive to the effects of stimulant drugs should be observed carefully in the initial stages of treatment.

Dosage: Adults, 1 tablespoonful; children (over 15 years old), 1 to 2 teaspoonfuls; children (4 to 15 years old), 1 teaspoonful. To be taken three times daily 30 minutes before meals.

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All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than the 15th of the month preceding date of issue. Proof is not shown. Copy of ad as it appeared in the journal accompanies billing.

PRACTICE OPPORTUNITIES

GENERAL PRACTITIONER—For well-established 14-man group. New building, adjacent excellent hospitals. Starting salary $15,000 or more, early partnership. Practice high quality medicine. Enjoy the Puget Sound country. Write or phone collect: T. J. Smith, M.D., Western Clinic, 521 So. K. Tacoma, Wash. 98405.

OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

URGENT NEED FOR ONE OR TWO GP'S—Chewelah, Wash. Population 1,600, 60 miles north of Spokane. Serves So. Stevens County with about 4,000 residents. Wonderful recreational area. Excellent 34-bed very busy hospital, and A.H.A. approved. Two doctors now approaching retirement, and would offer 100% cooperation to qualified, dedicated M.D.'s. Office space and housing available. Contact Ted Schlosser, Pharmacist, M. B. Snyder, M.D., or Karl J. May, M.D., Chewelah, Wash. 99109.

MEDICAL CENTER IN WESTERN WASH.—Has an opening for an internist and a dermatologist in a medical specialty group. City expanding rapidly with big industry and future outlook very promising. Climate and recreational facilities are excellent. Write Box 15-C Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

GENERAL PRACTITIONER—Four days a week, guaranteed salary $20,000 year to start. Progressive 10-man group, modern facilities, Southern California coastal city near Los Angeles. Write Robert Gumbiner, M.D., Medical Director, Family Health Program, 2925 No. Palo Verde, Long Beach, Calif. 90815.

NEUROSURGEON—For 65-man Permanente Clinic, Portland, Oregon. Starting income $30,000, Insurance benefits, retirement program, etc. N. W. Frink, M.D., Permanente Clinic 5055 N. Greeley, Portland, Oregon 97217.

GP LOCUM TENENS—Two to four weeks. Mid-June to mid-July to assist partner. Share time off. Excellent salary. Contact Robert E. Sotta, M.D., 740 Memorial St., Prosser, Wash. 99350, phone 984-4601.

WANTED—Physician for Student Health Service, at Oregon State University, Corvallis, Oregon. Starting salary for nine month appointment (Sept. 15, 1967 to June 15, 1968) $12,600. Age limit 60. Academic appointment with tenure, and other fringe benefits including retirement and insurance. Contact Charles E. Kremer, M.D., Director.

SURGICAL RESIDENCY, PACIFIC NORTHWEST—Draft call has created unexpected vacancy in 1st year of 4-year parallel approved program. Residents uniformly successful in board examination and in practice of surgery. Affiliations provide added technical experience to active hospital program which includes cardiac and vascular surgery as well as surgical subspecialties. Wide spectrum of clinical experience in referral center. Write Box 33-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

ORTHOPAEDIC SURGEON—Either board certified or board eligible to associate with an established 3-man orthopaedic group. Salary first year, then early partnership. Tacoma Orthopaedic & Fracture Clinic, 919 So. 9th, Tacoma, Wash. 98405.

EMERGENCY ROOM PHYSICIANS—Desire group of 3 to 4 physicians for 24-hour, 7-day-week coverage. Downtown Seattle 300-bed general hospital and medical center. Presently expanding to 500 beds. Excellent growth potential. Guaranteed base income. Write Box 30-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

INTERNIST—Four days a week, guaranteed salary $20,000 year to start. Progressive 10-man group, modern facilities, Southern California coastal city near Los Angeles. Write Robert Gumbiner, M.D., Medical Director, Family Health Program, 2925 No. Palo Verde, Long Beach, Calif. 90815.

SURGICAL PRECEPTORSHIPS—Open July 1, 1967, for one or two year appointments. American Board credit if three year residency completed. Oregon license required for 2nd year but not for 1st. If foreign graduate, ECFMG and permanent visa required. Salary $800 per month. N. W. Frink, M.D., Permanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

OTOLARYNGOLOGIST—For 65-man clinic servicing the Kaiser Health Plan in Oregon. Starting income $30,000; regular increases for 10 years. Insurance benefits, retirement program. N. W. Frink, M.D., Permanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

GENERAL PRACTICE OPPORTUNITY—In 12-man multi-specialty group in Eastern Washington. Town of 30,000, drawing area 100,000. Outstanding recreational area. Young group that has been expanding rapidly. New building with complete lab and x-ray facilities. Salary open with early partnership. Write Box 34-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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SITUATIONS WANTED

INTERNIST—With additional training in cardiology seeks position in Seattle area, July 67. Write Box 28-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

EXPERIENCED GP—Desires locum tenens for month of August. Planning to relocate in Wash. J. Pellicer, M.D., PO Box 732, Wausau, Wisc. 54401.

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ALLIED PERSONNEL OFFICES, INC.—Is prepared to place board-eligible physicians in desired positions. Allied is a source to call when staffing your office, clinic, or hospital with medically trained or experienced business personnel. Please phone or write either of our two offices when in need of doctors, administrators, technologists, dietitions, nurses, x-ray technicians, accountants, secretaries, clerical helpers. MA-4-4793, 247 Logan Bldg., Seattle, Wash., AL 2-3157, Medical Dental Bldg., Everett, Wash.

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FOR SALE COMPLETE MODERN OFFICE EQUIPMENT—Apparatus and furniture, all in first class condition. Also available 200 ma motorized table x-ray unit plus x-ray accessories. Owner leaving for residency. Write Box 21-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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ONE OFFICE AVAILABLE—University Village Medical Center, 5120 - 25th N.E., Seattle, LA 2-2340.

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FULLY-EQUIPPED PHYSICIAN'S OFFICE—Columbia City, 4906 Rainier Ave. S., Seattle. Area urgently needs a replacement for late physician who occupied this office 15 years. Rental $105 per month. Contact K. B. Watkins, PA 2-4878 after 5 p.m.

MEDICAL SPACE BROADWAY & E. COLUMBIA—Fully serviced professional offices from $2.00 to $3.50 per sq. ft. annually. Mr. Jack Hayes, Henry Broderick, Inc., MA 2-4350, Seattle.

FOR RENT—Prime office space of 850 sq. ft., across corner from Swedish Hospital. EM 2-0196 or EM 4-6243, Seattle.

FOR LEASE—Modern medical office, ground floor. South end across street from pharmacy and other medical offices. Ample parking; $175 per month. MA 4-3022, Seattle.

Meetings OF MEDICAL SOCIETIES

AMA Annual — June 18-22; Atlantic City, 1967; San Francisco, 1968.

AMA Clinical — Houston, 1967; Miami Beach, 1968.

Oregon Medical Association—Sept. 19-23, 1967, Portland.

Washington State Medical Association—Sept. 10-13, 1967, Seattle

Idaho State Medical Association—June 28-July 2, 1967, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society — Annual Meeting, Sept. 24-27, 1967. Salishan,Gleneden Beach, Oregon
Pres., John W. Whitelaw, Vancouver, B.C.
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy
Pres., Wallace Lindahl, Seattle
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association
Pres., Frank C. Henry, Seattle

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

West Coast Allergy Society—Nov. 30-Dec. 2, 1967, Phoenix, Arizona
Pres., John S. O'Toole, Riverside, Calif.
Sec., Roy R. Matteri, Portland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.)
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
Sec., E. W. Landreth, Portland

Oregon Radiological Society — University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
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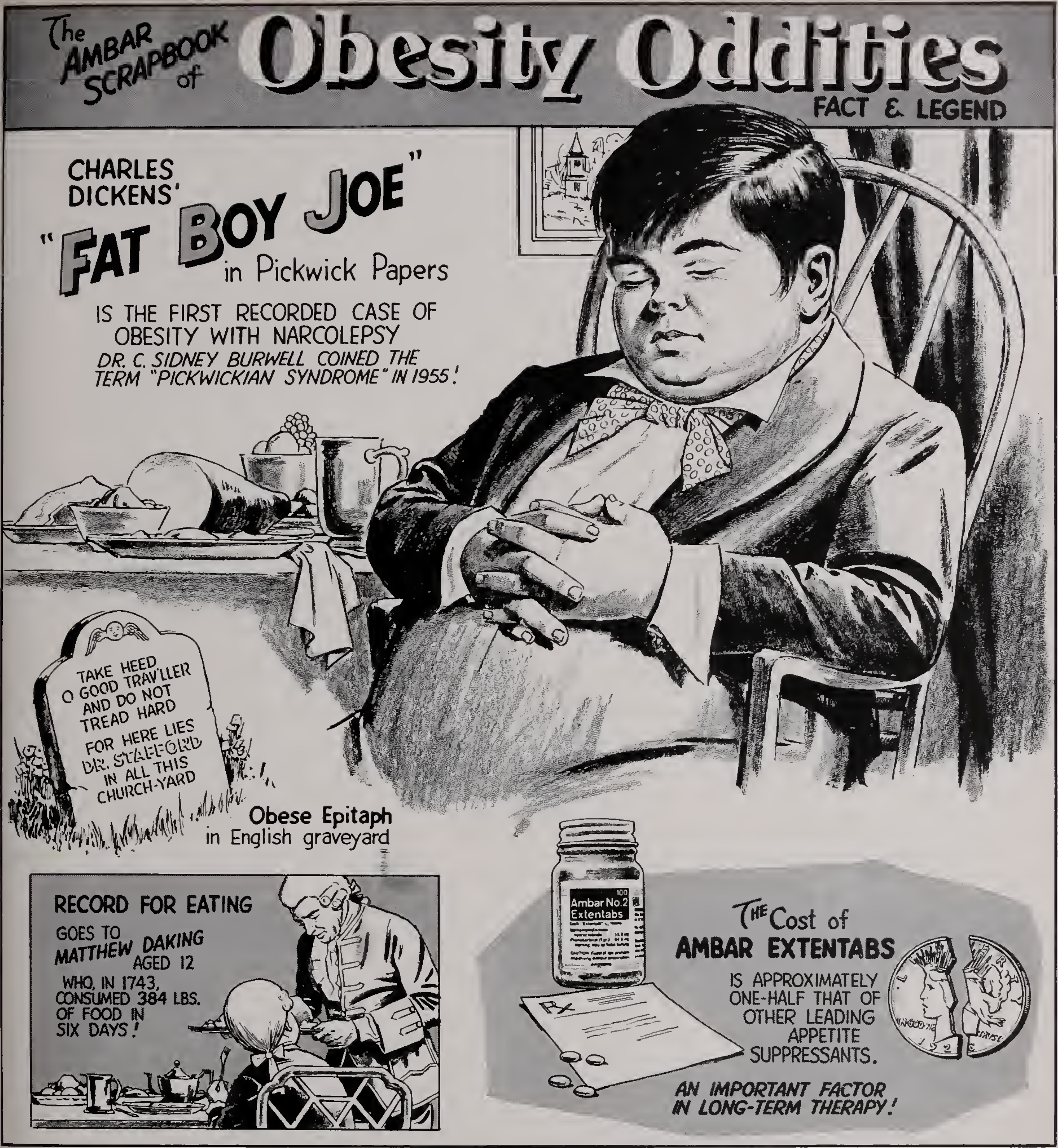
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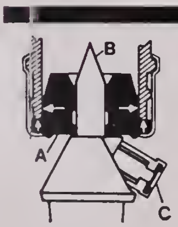

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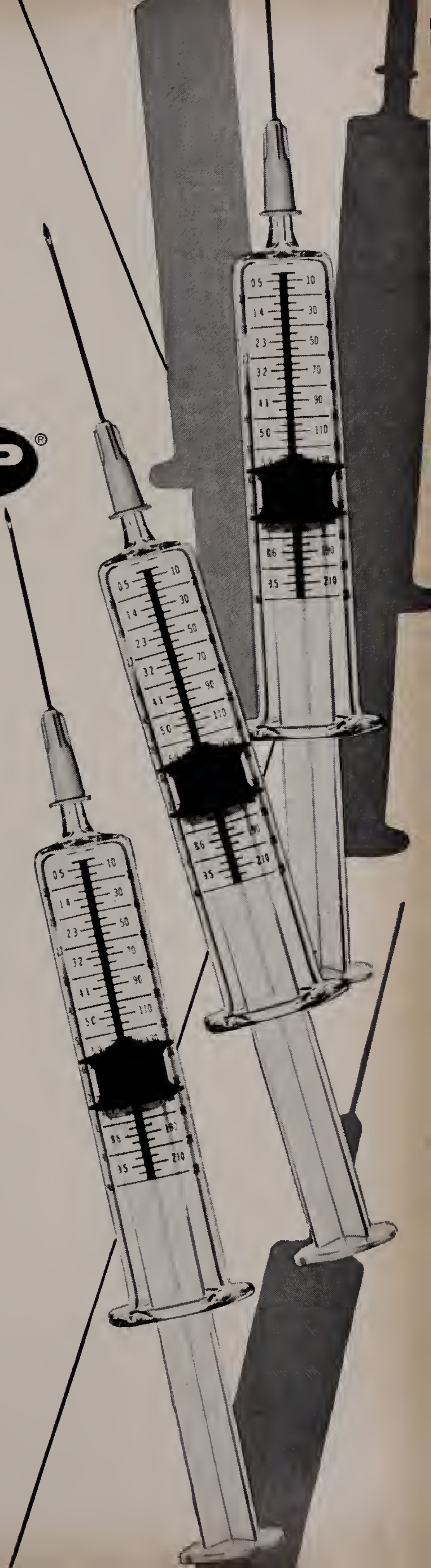

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New view of an oral contraceptive at work

Although suppression of ovulation remains the primary mode of action of oral contraceptives, newer knowledge indicates that products like Norinyl-1 — a combination of both low-dosage progestogen and estrogen for the full treatment cycle — may provide multiple action that helps explain their unexcelled record of contraceptive effectiveness. This report explores the possible secondary protective mechanisms offered by combined hormonal administration.

Accumulating evidence has indicated that sparse, highly viscous cervical mucus has a possible adverse effect on the motility and survival of spermatozoa.

The estrogen-opposing progestational ingredient of Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.) changes the usual midcycle picture of a thin, watery cervical mucus. The result — a built-in barrier that appears to inhibit sperm from reaching the ovum should one be released. The inset in the adjoining photograph shows immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

See last page for contraindications, precautions, side effects and dosage.

How the estrogen-opposing action of Norinyl-1 creates cervical mucus that may be hostile to sperm penetration

Normally, estrogen activity during the fertile midcycle stimulates the production of a profuse and watery cervical mucus that permits maximum sperm motility and promotes penetration.

But what happens when Norinyl-1 is administered? Its potent progestogen, norethindrone, opposes estrogen stimulation of cervical mucus. Consequently, the amount of mucus decreases and its viscosity increases. This results in a sparse but thick mucus barrier that appears to diminish the vitality of the sperm and to impair its powers of penetration.

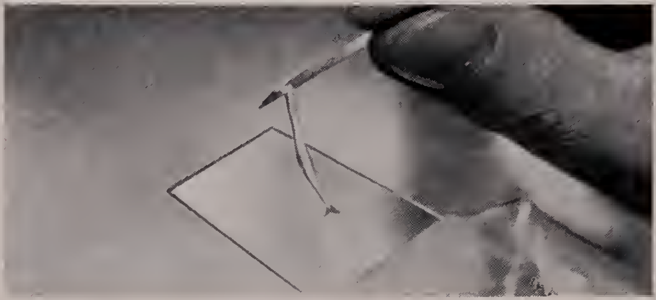
The role of viscous cervical mucus as a secondary action of Norinyl-1

In a report on 89 patients taking this medication,* cervical mucus obtained from cycle day 5 to cycle day 29 appeared scant and thick and exhibited little or no Spinnbarkeit.

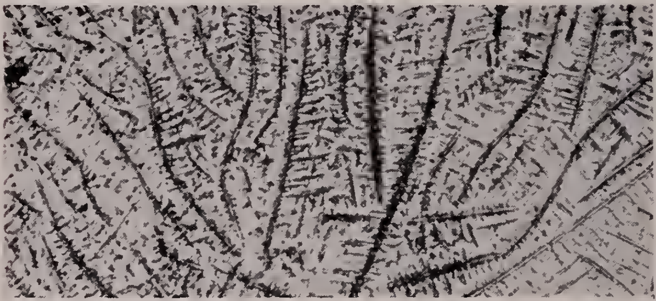
In the opinion of this investigator, the effect on cervical mucus may be sufficient to prevent conception.

*Cohen, M. R.: Symposium: Mechanisms of Action of Low Dosage Oral Contraceptive, Yale University Medical Center, New Haven, Conn., April 6, 1967.

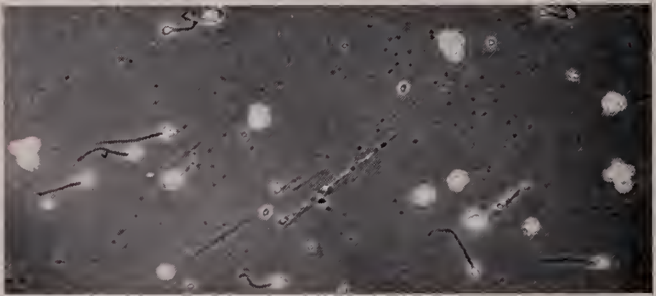
Normal cervical mucus at midcycle in untreated patient is known to permit sperm motility... promote sperm penetration.



Cervical mucus is thin and watery with a stretchability (Spinnbarkeit) of 15 to 20 cm.

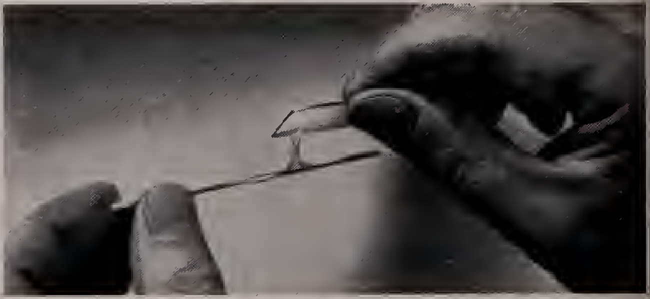


Thin, watery mucus crystallizes into this well-defined, fernlike pattern within a minute.

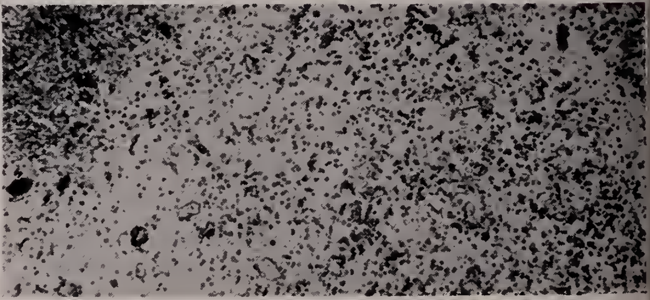


Spermatozoa appear healthy, are active and freemoving.

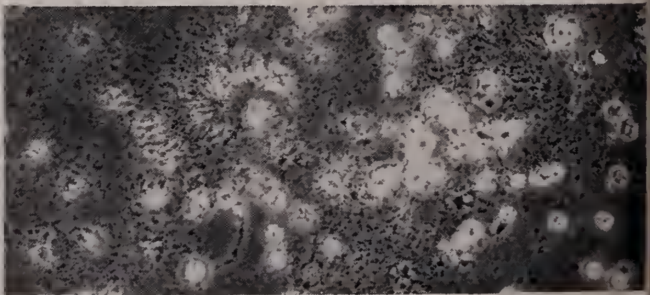
Viscous cervical mucus at midcycle produced by Norinyl-1 appears to impair sperm vitality... inhibit penetration.



Cervical mucus is scanty, thick and viscous. Spinnbarkeit is 1 cm. or less.



In thick, viscous cervical mucus the fern pattern is poorly defined or absent.

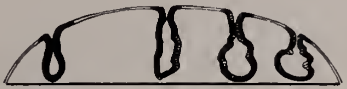


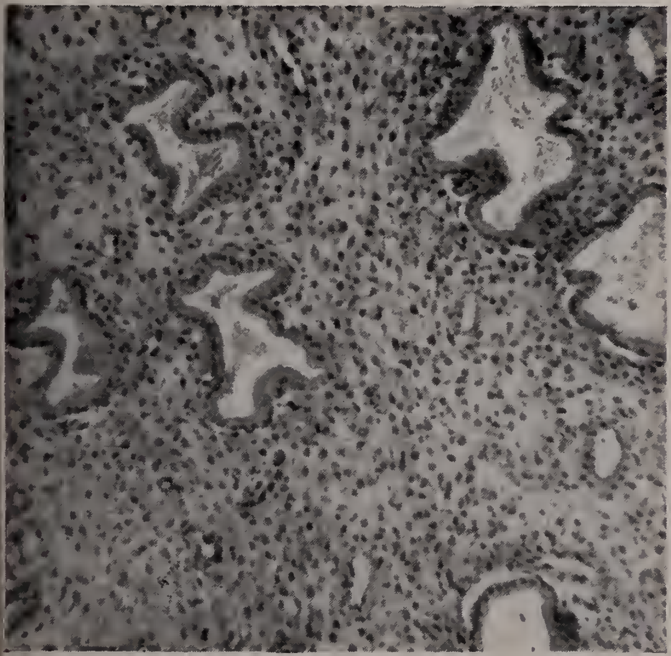
Immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

How Norinyl-1 alters normal endometrial responses—another possible protective mechanism

Let us suppose that an ovum is released—as occurs in an occasional, rare case—and somehow a sperm succeeds in penetrating the cervical mucus barrier. Should this come about, one additional action of Norinyl-1 may protect the patient from unwanted pregnancy. The theory is that progestogen intake makes endometrial tissue unreceptive to implantation.

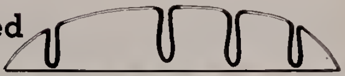
Endometrium of untreated patient

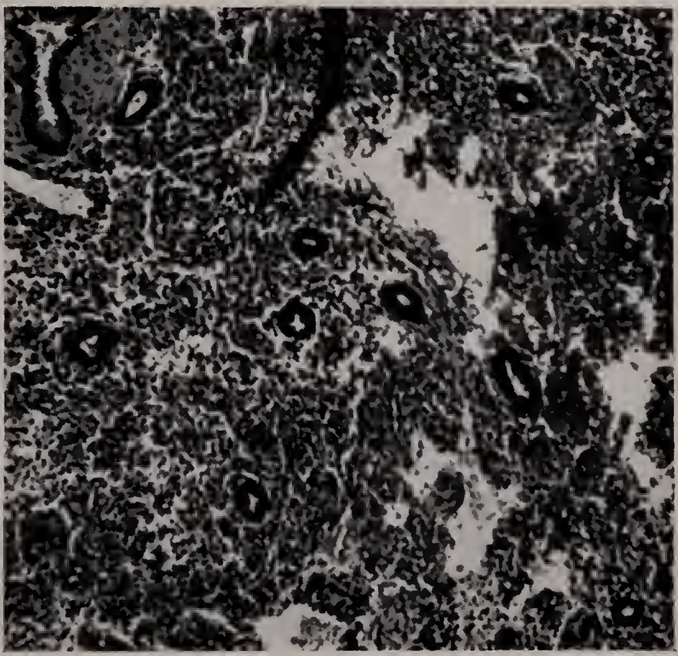




Normally, the endometrium progresses through a proliferative phase stimulated by estrogen and a secretory phase stimulated by progesterone. During the secretory phase the endometrium is receptive to the fertilized ovum.

Endometrium produced by Norinyl-1





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Norethindrone was first reported for use as a progestational agent in human beings in 1955. Norethindrone 2 mg. with mestranol 0.1 mg., as an oral contraceptive, is currently in use by over 2,000,000 women. Clinical experience now establishes that Norinyl-1 also amply meets the criteria of reliability and safety.*

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

PRESCRIBING INFORMATION

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia, or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of Norinyl-1 in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with Norinyl-1. Therefore, if such tests are abnormal in a patient taking Norinyl-1, it is recommended that they be repeated after the drug has been withdrawn for 2 months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibroids may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac, or renal dysfunction, require careful observation. 5. Although a cause and effect relationship has not been established, Norinyl-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, as in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged Norinyl-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Norinyl-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. A cause and effect relationship has not been demonstrated. 11. Because of the effects of estrogens on epiphyseal closure, Norinyl-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask the onset of the climacteric. 13. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following adverse reactions have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma, breast changes (tenderness, enlargement and secretion), loss of scalp hair, change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, erythema multiforme, erythema nodosum, hemorrhagic eruption, migraine, rash (allergic), itching, rise in blood pressure in susceptible individuals, mental depression.

The following occurrences have been observed in users of oral contraceptives. A cause and effect relationship has not been established: thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased bromsulphalein retention and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metapyrone test, pregnanediol determination.

Other side effects reported to have occurred in association with use of this drug are dizziness, hirsutism, pains in legs, back, chest and abdomen, dysuria, drowsiness, vaginal discharge, libido increased and decreased, eruptions, hypermenorrhea, hypomenorrhea, increased appetite, G.U. infections, varicose veins, abdominal fullness, acne, headache, nervousness, allergies, blurred vision, pain in eyes, and itching in eyes. *For complete clinical data, see package insert.*

Dosage and Administration: 1. One tablet of Norinyl-1 is administered orally for 20 days beginning on day 5 of the menstrual cycle. (Count day 1 of the cycle as the first day of menstrual bleeding.) Repeat this dosage schedule for each cycle. 2. If no menstrual period occurs after a cycle of treatment (20 tablets) in which patient adhered to the schedule, the patient must be instructed to resume taking the Norinyl-1 tablets 7 days after the previous 20-day course was completed. For example, if the last pill of a previous cycle had been taken on a Sunday, then a new cycle of treatment should begin on the following Sunday. 3. In the postpartum woman, it is recommended that the first cycle of treatment should begin on day 5 of the first menstrual cycle. However, Norinyl-1 should not be administered during lactation.

Availability: Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.)—Dispensers of 20 and 60 and bottles of 250 tablets.

norethindrone — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

CORRESPONDENCE

This department is a forum, provided for free individual expression. Letters are published as received and given little or no editing. Proof is submitted when time permits, before publication. Responsibility for statements rests with the authors of these communications and not with this journal which strives only to protect the right of individuals to speak for themselves. Ed.

Add: Expectations

Editor, NORTHWEST MEDICINE:

In connection with your editorial, "Wants and Needs" (May issue), I should like to suggest a third facet of the matter: expectations. Having worked in a civilian hospital in Viet Nam for two months, I returned with a painfully shaken view of medical wants, needs, and expectations. Long An Province Hospital, with 140 beds, 180 patients, and (at that time) one Vietnamese and two American doctors, was the only hospital in a province with a population of 370,000 people. Yet I worked fewer hours per week, under less pressure, than I do in my own practice at home.

This paradoxical and startling fact is due to the expectations—more than the needs, certainly—of the Vietnamese people, both patients and hospital personnel. First, the vast majority of the sick and injured never get to the hospital. Second, only under the most drastic circumstances does any medical care take place between noon and 2:30 pm, or after 5:30 pm. All except two or three nurses go home, the charts and pharmacy and lab and x-ray are locked up, and to work during those hours is to work alone. Third, the quality and quantity of medicines, equipment, diagnostic facilities, and training of personnel is so far from what we are accustomed to as to be incomprehensible until seen.

This does not mean that the capacity, willingness, nor dedication of Vietnamese nurses or technicians is lacking; given the example, the opportunity, and the training, they rise to the expectation of the doctor and to the needs of the patient as they learn to understand them.

As your editorial so aptly points out, even needs are a matter of some vague and shifting consensus, and wants are readily manipulated and redefined by all sorts of political and public-relations hocus pocus. One might wonder whether the pendulum, swinging from the Vietnamese state of expectation to the expectations or wants of today's U.S., may not swing past the point of actual needs. May we not find ourselves bogged down in artificial wants, losing sight of needs, and magnifying the role of medicine in our society beyond what we can afford either economically or psychosocially?

Yours truly,
M. T. MERRILL, M.D.
John Day, Oregon (97845)

Clarification Needed

Editor, NORTHWEST MEDICINE:

Your editorial "Wants and Needs" in the May issue was excellent. You speak of the point that needs so much clarification. We physicians must clarify what is needed and what patients need is more than six to seven minutes with their physician. Pretty soon we will be merchandising therapeutic techniques instead of practicing medicine and when that happens the vendors, physicians in government language, will have lost all their professional standing.

For a group that raised such a hue and cry about the doctor-patient relationship we certainly seem to be prone to sell it short, at six minutes per patient, for "efficiency." It seems to me that the medical profession has to make eloquently clear what the real meaning of a doctor-patient relationship is. Otherwise we're going to have it distorted by further "electoral wants" into something very close to the relationship in the supermarket between the clerks and the patron.

I'm trying to do some work in thinking it through for an article for Medical Economics. They seem a little interested and perhaps it can get moving.

Again congratulations on the excellent editorial.

Sincerely,
RALPH CRAWSHAW, M.D.
Portland, Oregon (97210)

Fair Play for Ostriches

Editor, NORTHWEST MEDICINE:

I am appalled to find an Editor of your stature allowing "The Ostrich Approach" to appear in print as an editorial in the May, 1967, issue of *Northwest Medicine*. It is enough to drive a man to drink.

I enclose extensive copy with regard to the habits of the ostrich and I will thank you not to go about knocking ostriches.

You prolong an old wive's tale which I think should be rectified in the interest of fair play for the Struthionidae.

Sincerely,
ERIC R. SANDERSON, M.D.
Seattle, Washington (98104)

From Dr. Sanderson's column, "Thoughts While Scrubbing" *Pacific Medicine and Surgery*, September-October, 1964:

Now, ordinarily, I don't care much for ostriches. They have a lot of nasty habits; they're generally pretty messy; they'll swallow anything—glass, stones, nails—anything. they'll kick at you if you get close. they squawk quite a bit; they flop around and raise the dust.

But they don't bury their heads in the sand. Let's set the record straight on that. Moonlighting interns and residents might do that, figuratively speaking; medical educators might also. But not ostriches. Not Struthio camelus, nor S. australis or S. molybdophanes. They know better.

Here's the way I see it:

You shouldn't friend, nor yet should I
Malign the Struthionidae.

I'd even urge, my friend, that we
Speak well of Struthionidae.

It's oft been said when danger's near
He dunks his head and lifts his rear.

It isn't true, I must report,
He don't do nothing of the sort.

Despite his nutty, stupid rep
The Struthio is plenty hep.

When danger lurks (and he can tell)
He flaps his wings and runs like hell.

There's several times that I could name
I must admit I've done the same.

For he who fights and runs away
Will live to love another day.

Whose head is buried 'neath the sands?
More likely homo sapiens!

Rock and Roll Walker

Editor, NORTHWEST MEDICINE:

For patients in short leg cast. who can bear weight, I've been using a removable wooden extension rather than walking peg. It is strapped on, is light, and is readily removable at night. Contour of the bearing surface is designed to permit the range of motion necessary when walking with a stiff ankle. Most patients find them quite convenient.

I make these appliances in my own workshop and usually have a range of sizes on hand. Recently, however, I did not have the proper size for a patient who had broken his leg and was in a cast. I knew that he was handy with tools so gave him the pattern and suggested that he make one for himself. He did—and then wrote the letter enclosed.

Yours very truly,
REX PALMER, M.D.

Rex Palmer, M.D. *"P.F. & P.I."**
Medical Arts Building
Sixth Floor
Located Somewhere Financial Jungle
Second Ave.
Seattle, Washington

Dear Sir:

Following find costs of labor and material and anxiety for construction of one, (1) patented pending Palmer "rock & roll' walker, Would you believe the *"Watusi?"*

1—Chunk worm-eaten soft pine	33¢
Assorted nails or brads if you prefer	11½¢
1—Chunk welcome mat, furnished by you	NC
Charge for the cutting of above	4½¢
1—Small piece ¼ in. plywood, without holes	2¢
4—Swishes with the glue brush & glue	8¢
1—Bandaid (for bruised thumb)	3¢
½—Kilowatts for the running of saw	3¢
5—Broken sabre saw blades (my fault)	NC
Outside Services (Neighborhood Engineers)	1-Fifth Vodka 1-Six pack (beer)
GRAND TOTAL	64¾¢
Due you for infringement of patent rights and use of same	60¢
	4¾¢

Net due me 2 flies suitable for upper Yakima fishing only with guarantee of results when used properly.

Yours Roll-up
SKIP GUILFORD

*Part time fisherman
Part time Inventor

Hysterical Generalizations

Editor, NORTHWEST MEDICINE:

Please permit me to correct some of the hysterical generalizations of Exner (Northwest Medicine, Correspondence, April 1967) who labels *all* science writers as spoon-fed, uncritical ballyhooers.

Using the Exner technique, I contend that *all* science writers are extremely selective, highly intelligent, incisive and super-critical. Ridiculous? Yes, isn't he.

Still employing the broad-brush method of nonsubstantiation, blind opinionation and faulty conclusion, I would condemn *all* doctors as sadists for the actions of one doctor. Do they not *all* glory in the pain and expense of needless tooth decay which they permit through anti-fluoridation efforts?

It has been 15 years since Exner led the anti-fluoride people to a Pyrrhic victory. Now a whole new generation in Seattle has grown up to experience 70 per cent more tooth decay than necessary.

Yes, I have heard all about the poisonous nature of fluorine. I have heard, too, about how a tea bag

continued on page 618

For your protection . . .

injections in this office are given with TUBEX,* using a new, sterile disposable unit with a new, supersharp, stainless steel, siliconized sterile needle

. . . designed for one use only.

CTO—DEC., 1966

*TUBEX® Closed Injection System, Wyeth

PRINTED IN U.S.A.—CODE 7408

Your name on the dotted line can mean so much to your patients

And to you. . . . .

........The TUBEX® Closed-Injection System means

Efficiency and convenience

TUBEX injectables are ready for immediate use. No measuring of doses; no filling of syringes. Saves professional time. Easy to store in the office, easy to carry on house calls.

Precision and protection from cross contamination

TUBEX injectables are premeasured, accurately and clearly identified as to name, dose, control number and expiration date (if any). Used once, then discarded, TUBEX prefilled sterile cartridge-needle units cannot cause cross contamination.

Coverage of virtually all injection needs

The wide range of drugs available in TUBEX sterile cartridge-needle units can meet over 70% of common private practice injectable needs. For drugs not yet in TUBEX form, empty sterile cartridge-needle units can usually be employed—and retain most advantages of the system.

TUBEX® Closed Injection System

Wyeth®
SERVICE TO MEDICINE

If you are already using TUBEX in your office and don't have a waiting-room placard, Wyeth will be happy to send you one. A postcard will do.

Wyeth Laboratories
Professional Service
Box 8299
Philadelphia, Pa. 19101

UNIT-DOSE

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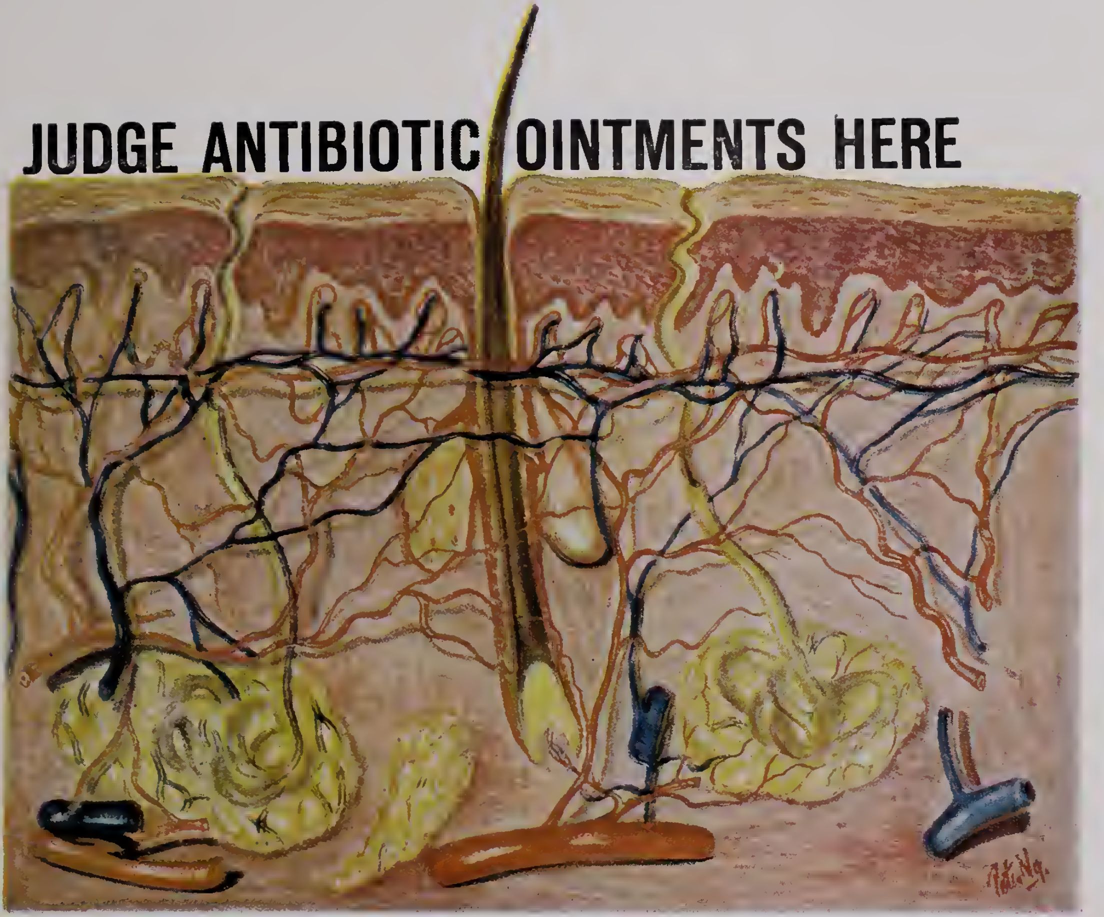


Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand
POLYMYXIN B-BACITRACIN-NEOMYCIN
OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

continued from page 614

hung around the neck will cure a cold. But, when Exner talks about science writers being spoon-fed-pap-regurgitators, he should read the one about people in glass houses.

For a man who dares to discuss spotting "some glaring faults," "pseudoscience" and "glaring defects" in the Harvard osteoporosis study, he should be the last chap to say that "the effects of fluorine-bearing waters cannot be determined by examining subjects who didn't use the waters. . . ."

After all these years of quoting (highly selected, minority) opinions about fluoridation, do you mean to say Exner hasn't heard of a control group being used in connection with research? Incredible! Yes, isn't he.

Sincerely,
AL DIEFFENBACH
Medical Editor, Seattle Times

Admission Policy Under Medicare

Editor, NORTHWEST MEDICINE:

Information has reached us in sufficient proportions that we feel some explanation should be sent regarding admission procedures for those individuals hospitalized under Medicare.

Individuals the age of 65 and over who need hospitalization have a free choice of hospital until these benefits have been exhausted after the 90th day in one "spell of illness." If a person is actually in the private hospital on the 90th day, he may remain there until discharged for that period of illness. After discharge and in the same "spell of illness' any readmission in King, Pierce and Clark Counties must be in the county hospital.

When the individual has had 60 well days, a new "spell of illness" begins and free choice of hospitals would again be available.

Sincerely,
ROBERT P. HALL, M.D.
Division of Medical Care
State of Washington

Quicker Than Liquor

Editor, NORTHWEST MEDICINE:

A hippie by name Manny Trips,
Made a new drug which caused coeds flips—
LSD and Enovid,
It tasted quite horrid,
But man it was like carefree trips.

WILDEN WOOLEY, M.D.
Chairman, Dept. of Sexopharmacology,
University of Libido College of Medicine

Tandearil®
oxyphenbutazone

Therapeutic Effects: Tandearil is a nonhormonal compound which may rapidly resolve inflammation and help restore normal joint function. Its action does not affect pituitary-adrenal function or impair immune responses. Its value in osteoarthritis is especially noteworthy because this disorder responds inconsistently to steroids and is often resistant to salicylates. Further, indomethacin is limited only to osteoarthritis of the hip, whereas oxyphenbutazone is effective in all forms of the disease.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage. Make regular blood counts. Discontinue the drug and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, or a generalized allergic reaction may occur and require withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Osteoarthritis: The initial daily dosage in adults is 300-600 mg. in divided daily doses. When improvement occurs, dosage should be decreased to the minimum effective level; this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

For complete details, please refer to full prescribing information. 6562-VI(B)R

Availability: Tablets of 100 mg.

Geigy
Geigy Pharmaceuticals
Division of Geigy Chemical Corporation
Ardsley, New York

Geigy

Tandearil®
oxyphenbutazone

helps osteoarthritic joints move again

	3 out of 4 osteoarthritics completely or markedly improved
Sperling, I.L.: 3 Years' Experience with Oxyphenbutazone in the Treatment of Rheumatic Disorders, Applied Therapeutics 6:117, 1964.	76.9% of 407 patients
Watts, T.W., Jr.: Treatment of Rheumatoid Disorders with Oxyphenbutazone, Clin. Med. 73:65, 1966.	84.6% of 39 patients

Please see adjoining page for brief prescribing summary.

TA-4919 PC

Against these three major pathogens…

Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemolytic Streptococci

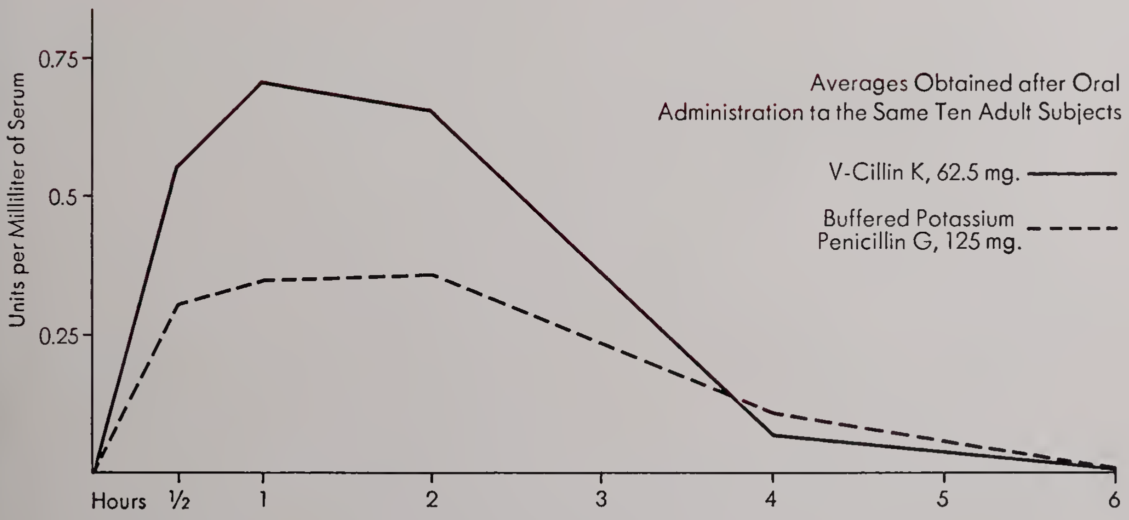
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph. Aureus (Penicillin-Sensitive)		Streptococcus, Group A		Diplococcus Pneumoniae	
	MIC (mcg./ml.)		MIC (mcg./ml.)		MIC (mcg./ml.)	
	Median	Range	Median	Range	Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K® Lilly 700367

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses

Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Refractory infections generally respond to a second treatment three to four days following completion of the first. Treatment of gonorrhea with severe complications should be individualized, with prolonged and intensive treatment. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [032067]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

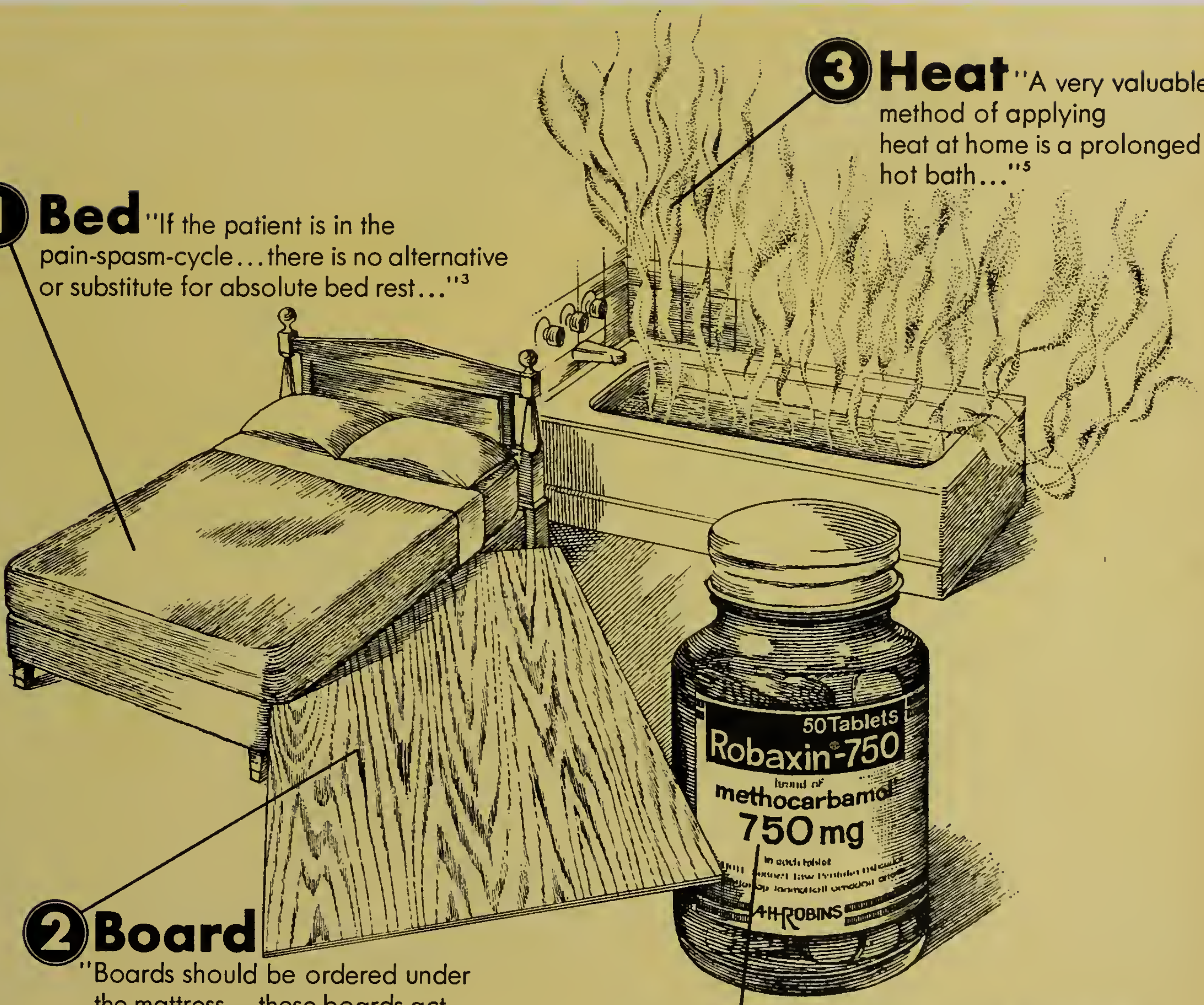
Lilly

700867

LOW-BACK PAIN

A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:



③ Heat "A very valuable method of applying heat at home is a prolonged hot bath…"[5]

① Bed "If the patient is in the pain-spasm-cycle…there is no alternative or substitute for absolute bed rest…"[3]

② Board "Boards should be ordered under the mattress…these boards act by immobilizing the spine…"[4]

④ Robaxin®-750
(methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm "…without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated for relief of skeletal muscle spasm. **Contraindicated** in hypersensitive patients. **Side Effects** (lightheadedness, dizziness, drowsiness, nausea) may occur rarely, but usually disappear on reduced dosage. Hypersensitivity reactions develop infrequently. See product literature for further details. **Also available:** Robaxin® Tablets (methocarbamol, 500 mg.) Robaxin Injectable (methocarbamol, 1 Gm./10 cc.) **References:** (1). Godfrey, C.M.: Applied Therap. 8:950, 1966. (2). Gottschalk, L.A.: GP 33:91, 1966. (3). Rowe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cozen, L.: South Dakota J. Med. 18:26, 1965. (5). Sota-Hall, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteopath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New York J. Med. 62:1985, 1962.

A-H-ROBINS
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SEARLE *Research in the Service of Medicine*

Flammable Fabrics Act Amendments of 1967

Regular accounts of sensational scientific discoveries serve to give the public a romantic, but not necessarily realistic picture of the daily work of physicians. The popular magazine reader is sated by stories of cures, breakthroughs, and life and death struggles. Few physicians spend much time at that dramatic battlefront—most are engaged in health maintenance operations.

Though it may be pleasant to be surrounded by an omnipotent aura, there is a danger in unrealistic expectations of physician services, where patient demands may outstrip available resources and professionally determined needs. The public has been led to believe (albeit through our own public relations machinery) that cures and breakthroughs are around the corner for all diseases, and that the medical profession is capable of solving any and all health problems. This is manifestly absurd in the era of congential defects and chronic degenerative diseases. It is time to throw the ball back to the public, clearly exposing the fact that many of medicine's problems are society's problems that will never be solved by "laying on the hands."

An example of the limitations of medical care was graphically portrayed at the last WSMA-School of Medicine conference at Pack Forest by Lester Breslow, Health Director of the State of California, who stated: "In terms of making a significant impact to improve the health of our citizens, if I were offered the choice of doubling the number of physicians in California tomorrow, or banning the sale of cigarettes, I would have little hesitation in choosing the latter." He drew similar analogies between neonatal mortality and poverty; chronic lung disease and air pollution; and heart disease and overeating. To make significant inroads on such major health problems, physicians must utilize resources outside the profession. A major assignment is influencing public policy as it affects health—political medicine.

A tangible opportunity arises in consideration of the problem of death and serious injury from burns. The treatment of major burns remains completely unsatisfactory despite advances in other fields of medicine. We haven't materially improved the survival rate in over 30 years, nor have we done much to alter morbidity. The best plastic surgery, contrary to popular impression, leaves unsightly scars. Our modern treatment of shock has merely meant that instead of the fatal outcome occurring at three days, the "green death," pseudomonas infection, takes its toll at three weeks. Perhaps the recently proposed silver nitrate treatment will save an occasional life; it is too early to assess. The fact remains, there is little hope on the horizon that medical science will substantially alter this grim picture. Prevention is the only answer.

Burns caused by the ignition of clothing constitute the great scourge, and are susceptible to preventive measures—flame retardant textiles. Contact burns and scalds occur more frequently, but do not often cause death or severe disability. The target population for clothing burns is clear—young children and helpless oldsters.

Children are burned in several typical patterns. Classically, the young girl wearing a flannel nightgown or a frilly skirt comes in contact with an open flame, either a fireplace, space heater, or matches. When their clothing ignites, they naturally become frightened and run, fanning the flames. The incidence of such burns is highest among poorer families who heat their homes with open fireplaces and space heaters, and who dress their children in flimsier garments more apt to support combustion. Boys between five and ten play with matches, and near bonfires. The end result is the same; ignition of clothing. Cotton and rayon are the most flamable fibers, with the synthetics varying in flamability. Wool is the least flammable and is rarely involved in serious clothing burns.

What is needed to prevent serious burn injuries is clothing that does not readily support combustion, smoldering when ignited instead of flaring. It is now possible to treat cellulose fibers with chemicals such as APO-THBC markedly reducing flammability. The less combustible the fabric that goes into children's clothing, and the more widely such clothing is distributed, the greater will be the reduction in mortality and morbidity from burn injuries. Yet such clothing is not commercially available in the United

continued on page 681

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A Small Hospital Coronary Care Unit

SAMUEL F. ARONSON, M.D./JOHN D. COLLINS, M.D./GREGORY G. JOHN, M.D.
Seattle, Washington

One-hundred forty-five patients were admitted to the coronary care unit of a 197-bed hospital in Seattle, during its first year of operation. Fifty-six had proven myocardial infarction and 37 survived. Seventy-four had other heart diseases and 15 had no heart disease. Routine procedure on admission includes oxygen administration, placement of monitor and pacer electrodes, and insertion of an intravenous cannula. Operation of the unit is supervised by a committee of the medical staff but individual care of patients is directed by the patient's own physician. A continuing program of training of unit personnel has been found necessary. Nurses are trained in a coordinated plan of action to deal with emergencies and are authorized to proceed with emergency treatment when necessary.

Early in 1965 it became apparent that specialized, intensive care for patients with acute myocardial infarction resulted in improved survival rates. Despite increase in cost for such intensive care, the lessened morbidity and mortality justifies such care as ordinary practice for patients with acute myocardial infarction. So far, results achieved by coronary care units have been reported by large medical teaching centers with salaried, full-time, medical directors and with almost limitless funds for housing, equipment and staff. Treatment of patients in such units has been uniform, with rigid controls and supervision.

In contrast, the coronary care unit at The Doctors Hospital, Seattle, is unique in many respects: We believe it was the first such unit to be established in the Pacific Northwest; it operates in a relatively small, general, private hospital without benefit of any financial grant or endowment; it is housed within existing hospital facilities rather than in a new and specifically designed area; its supervision and operation is by volunteers from the hospital's attending staff; and the care of each patient is directed by his own private physician. The experiences gained may be of service to comparable institutions planning coronary care units.

planning

Initially, a committee surveyed and selected equipment that seemed most suitable, had the best potential for future expansion, and appeared to be supported by the best maintenance service. Next, the best possible available space within the hospital was selected. This involved conversion of a six-bed ward and an adjoining semi-private room on the male medical floor into a four-bed coronary care unit. Influencing this decision was the fact that the major nursing experience in management of acute myocardial infarction was on this ward and its nurses were to rotate in the unit.

After the space was remodeled and the equipment installed, and before the first patient was admitted on October 15, 1965, a training period of several weeks was conducted for nurses and housestaff officers. The Board of Trustees designated a cardiac care committee to formulate policy and to supervise medical conduct of the unit. Each week, one member of this committee, in turn, assumes responsibility for the unit. During his week of duty, this physician is always available through a Bell-Boy page system. The committee meets frequently to review unit problems and to hold critiques. The head nurse-in-charge of the male medical ward was appointed nurse-in-charge of the unit. She meets with the cardiac care committee to discuss problems in nursing care.

admission procedure

A standardized procedure is initiated for each admission unless specifically countermanded by the attending physician. Each patient is placed in bed; is given oxygen by cannula; has monitor electrodes applied to his chest; has pacer electrodes taped into place (but not plugged into the pacer itself); and has an IV-cannula introduced. Five per cent dextrose in water is given slowly, to keep the cannula open. This provides a means for immediate introduction of emergency drugs.

Monitoring consists of measurement of the heart rate by a cardiotachometer at the bedside and at a central station within the unit itself. If the cardiotachometer registers rates above or below arbitrary limits, it activates audible and visible alarms. An electrocardiographic trace of each patient is displayed on a bedside oscilloscope.

The central station serves as the base of operation for a registered nurse who is always on duty. The duty nurse never leaves the unit until she is replaced by one of the other nurses trained in unit care. The central station has a console which contains four cardiotachometers, one for each bed, a single oscilloscope on which the electrocardiographic trace of any of the four patients may be displayed selectively, and an electrocardiograph that is activated automatically whenever an alarm sounds from any of the four beds. It may be manually activated as well.

calling doctor CCU

In the event of an emergency, certain procedures are followed in an orderly prescribed fashion.

1. When an alarm sounds, the duty nurse immediately activates a stop watch as she proceeds to the patient's bedside. Elapsed time from onset of emergency is helpful in determining the spacing of medications. (More elaborate units have automatic clocks that start at the onset of the alarm.)
2. If a true emergency exists, the nurse presses a "panic button" at the patient's bedside. This alerts the nurses on the male medical ward to send all available personnel. It also alerts the switchboard operator to page "Doctor CCU", to which house staff and attending staff respond.
3. If asystole is present, the nurse thumps the chest twice. If asystole persists, she plugs in the external pacemaker (the electrodes already being in place) and, if necessary, rapidly increases voltage to maximum. If there is no response to maximum voltage within 20 seconds, the external pacer is discontinued and external cardiac massage is initiated. On a few occasions, an intracardiac needle pacer has produced effective heart beats when the external pacer has failed to do so.
4. The first nurse arriving from the male medical ward (within seconds after the alarm is sounded) brings the crash cart (Figure 1), which is always in the unit, to the bedside. She places an artificial circulation board under the patient, inserts a pharyngeal airway and initiates artificial ventilation. The headboard of each bed is removable so ventilatory efforts are facilitated without interference with other emergency procedures.

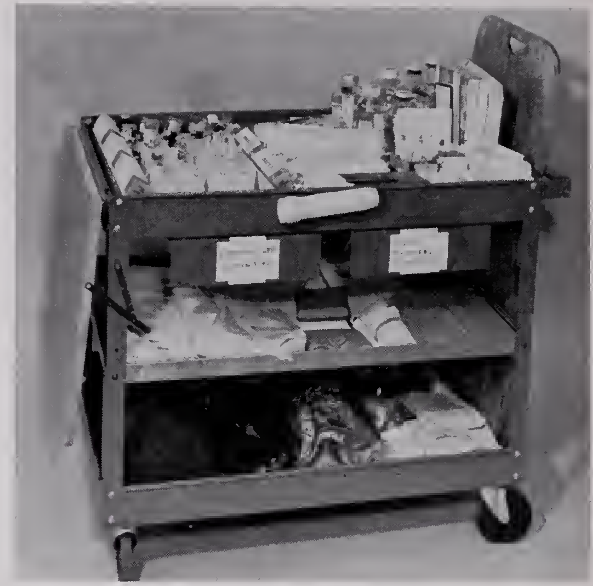

Fig. 1 Coronary Care Crash Cart

5. The next nurse immediately prepares syringes with sodium bicarbonate, epinephrine, isoproterenol, lidocaine, calcium chloride and procaine amide. She then becomes the recorder for all events during the emergency. This provides an accurate resume' of all emergency efforts for our critiques.
6. Members of the anesthesia department respond to the alarm and assume responsibility for efforts to maintain ventilation.
7. Administration of drugs is supervised by the senior physician present.
8. The procedures for ventricular fibrillation are similar except that external cardiac massage is started immediately; i.e., no attempt at external pacing is made. All coronary care unit nurses are familiar with use of the defibrillator. They are instructed and authorized to use it whenever house or attending staff members are not available within one minute.
9. A checklist has been devised (Table 7) to give a complete and uniform summary of the patient's stay in the unit.

diagnostic criteria

Rigid criteria for establishing the diagnosis of acute myocardial infarction were used in deriving statistics, Table 1. Some patients classified by us as acute myocardial ischemia may have had acute myocradial infarction. The patients classified as having had acute myocardial infarction had electrocardiographic, serum enzyme or autopsy confirmation. One-hundred forty-five patients were admitted to the unit between October 15, 1965, and October 15, 1966. Of these, 56 or 38.6 per cent, had acute-myocardial infarction; 74, or 51.0 per cent, had other heart diseases; 15, or 10.3 per cent, had no heart disease. One-hundred thirty, or 89.6 per cent, had some type of heart disease. Admission to the coronary care unit of those without heart disease was justified since acute myocardial infarction was considered in the differential diagnosis upon admission, Table 2. Some of those with heart disease other than acute myocardial infarction were admitted with a diagnosis of acute or impending myocardial infarction. Others were admitted for use of the special monitoring facilities within the unit. Many in this latter group had life-threatening arrhythmias, Table 3. A brief case report illustrates:

CASE REPORT

A 74-year-old patient entered the hospital with rapid ventricular tachycardia and profound shock. He was so critically ill that it was elected to use electrocardioversion to terminate his arrhythmia rather than drug therapy. Following the direct current countershock, he developed ventricular fibrillation which was immediately converted to a normal sinus rhythm by electric defibrillation. In the next few days, he had several recurrences of ventricular tachycardia, but because of the continuous monitoring, all were immediately recognized and successfully treated. He was discharged from the hospital alive and well with prophylactic procaine amide and has had no recurrences after a six-month observation period.

Of the 56 patients with acute myocardial infarction, 19, or 33.9 per cent, died. If all patients with acute myocardial ischemia had been included in the acute myocardial infarction category, the mortality rate would have been 20 per cent.

During the year under study, some patients with acute myocardial infarction were admitted to beds other than those in the coronary care unit. Some patients were admitted to the unit only after they had become critically or terminally ill on regular wards. Two of the 19 deaths occurred on medical wards several days after the patients left the coronary care unit. Age and sex distribution of patients with acute myocardial infarction are shown in Table 4. There were 43 males with 12 deaths and 13 females with 7 deaths.

Table 5 summarizes the 19 deaths. In seven, the terminal event was ventricular fibrillation. Three were successfully defibrillated one or more times, but died several hours to 24 days later. None of the five patients with cardiac asystole who received external, electrical pacing survived.

Table 1

Admissions Oct. 15, 1965 to Oct. 16, 1966 145

	No.	Per cent
Proven acute myocardial infarction	56	38.6
Other heart disease	74	51.0
No heart disease	15	10.3
Total	145	100.0

Table 2

Without Heart Disease 15 (10.2 per cent)

Acute CVA	3
Acute gastritis	2
Acute anaphylactic shock	2
Syncope, etiology unknown	2
Acute cholecystitis	1
Peptic ulcer, ruptured	1
Peptic ulcer, acute	1
Chest injury, severe	1
Acute pneumonitis	1
Hyperventilation	1

Table 3

Other Heart Disease 74 (51.2 per cent)

	No.	Per cent of total admissions
Acute myocardial ischemia	35	24.2
Serious arrhythmias	19	13.1
Acute pulmonary edema or heart failure	11	7.0
Other	9	6.0

Table 4

Acute Myocardial Infarctions 56 (38.6 per cent)

Age	30-39	40-49	50-59	60-69	70-79	80-89	Total
Males							
Lived		6	6	11	7	1	31
Died	1	1	1	5	3	1	12
Females							
Lived			3	3			6
Died					6	1	7

78 per cent of all acute MI under age 70 years survived.
42 per cent of all acute MI 70 years and older survived.

Table 5

Acute Myocardial Infarction—Deaths 19
(33.9 per cent of MI)

	No.	Per cent of MI
Ventricular Fibrillation (Three successfully defibrillated one or more times but died subsequently)	7	12.5
Cardiac Standstill (All paced withous success)	5	8.9
Died in 1½ hours to 24 hours	10	17.9
Died one to five days after admission	4	7.1
Died 6 to 24 days after admission	5	8.9

Table 6

Acute Myocardial Infarctions—Survivals 37
(66.1 per cent)

Various ectopic arrhythmias	27 (Approx.)
Successfully defibrillated (up to 7 times)	4
Successfully revived by external massage (cardiac standstill)	1

Two of the 19 patients had ruptured ventricles, proven at autopsy. Ten of the 19 deaths occurred one and one-half to 24 hours after admission to the unit.

Thirty-seven, or 66.1 per cent, of the patients with acute myocardial infarction survived, Table 6. Most of them had various ectopic arrhythmias. Four had ventricular fibrillation one or more times and were successfully defibrillated each time. A fifth patient had cardiac asystole and was resuscitated by external cardiac massage.

experience gained

As our experience increased, certain deficiencies became evident. Although well-trained personnel are essential, they are not necessarily permanent. Therefore, a continuing training program is important. This training could be conducted best by a full-time medical director.

Table 7

Checklist for reporting patient summary.

Time in CCU:
- Under 24 hours
- 24 to 48 hours
- 48 to 72 hours
- 72 to 96 hours
- Over 96 hours

Heart Disease: Yes No

Etiology:
- Arteriosclerosis
- Congenital
- Hypertension
- Infectious
- Rheumatic
- Traumatic
- Thyrotoxic

Myocardial Infarction: Yes No

Location:
- Anterior
- Posterior

Other

Coronary Insufficiency: Yes No

Pericarditis: Yes No

Shock: Yes No

Congestive Failure: Yes No

Defibrillation: Yes No

Alkalinizing Solutions: Yes No

Polarizing Solutions: Yes No

Vasopressors:
- None
- Aramine
- Vasoxyl
- Wyamine
- Norepinephrine
- Nesosynephrine

Cardiac Pacing:
- None
- Internal
- External

Arrhythmias:
- None
- Sinus bradycardia
- Sinus tachycardia
- Sinus arrhythmia
- Premature atrial systole
- Paroxysmal atrial tachycardia
- Paroxysmal atrial tachycardia with block
- Atrial fibrillation
- Atrial flutter
- Nodal rhythm
- Nodal tachycardia
- Premature ventricular systole
- Ventricular tachycardia
- Ventricular fibrillation
- First degree AV heart block
- Second degree AV heart block
- Third degree AV heart block
- Interference dissociation
- Ventricular standstill

Anti Arrhythmic Drugs:
- Digitalis
- Isuprel
- Atropine
- Quinidine
- Pronestyl
- Dilantin
- Potassium
- Lidocaine
- Solu-cortef

Cardiotonics:
- None
- Digitalis
- Calcium
- Epinephrine
- Solu-cortef

Outcome:
- Survived
- Did not survive

Comments:

Since this is not always possible in a small hospital such as ours, we have been dependent upon voluntary help for this training program.

Ideally all patients with suspected myocardial infarction should be admitted directly to coronary care units. Patients with apparently mild findings on admission may develop unexpected and serious complications. These are the ones who usually benefit most from resuscitative measures. Emphasis should be placed on prevention of complications. Early treatment of minor arrhythmias often prevents development of major, life-threatening arrhythmias. Whenever the monitor reveals frequent premature systoles, anti-arrhythmic drugs should be given. Bradycardia and early A.V. conducton defects should be prepared for pacing before cardiac asystole occurs. Our experience has indicated that external pacing is unsatisfactory so we recommend and initiate insertion of temporary transvenous pacing catheters. Congestive failure and shock contribute to disturbances in rhythm and are being treated vigorously.

Equipment for obtaining chest x-rays of better quality than those possible from portable machines, for detection of early congestive heart failure, should be located within the unit. Unit design should permit expansion to include facilities for monitoring of other physiologic variables as such procedures become practical. Central venous pressure monitoring may become an adjunct to the early detection of pump failure. It is conceivable that sometime in the future all vital signs will be monitored and channeled into a computer that will give continuous assessment of the patient's status. Prevention of complications is the *sine qua non* for reducing mortality and morbidity in acute myocardial infarction. A single room of size adequate to accommodate facilities for total care and visible from a central nursing console should be provided for each patient.

summary

Eleven of 56 patients with acute myocardial infarction developed ventricular fibrillation. Seven of these were successfully defibrillated one or more times and four of these left the hospital alive. One patient with cardiac asystole was resuscitated by external massage. Several other patients with acute myocardial ischemia or serious arrhythmias, such as ventricular tachycardia and A. V. heart-block, survived because of the special facilities. We cannot evaluate statistically the number of patients with acute pulmonary edema or cardiogenic shock who benefited from special care. ■

1316 Madison St. (98104)

chemical nomenclature

generic	trade
isoproterenol	Isuprel Norisodrine
lidocaine	Xylocaine
procaine amide	Pronestyl

abstracto

Ciento cuarenta y cinco pacientes fueron admitidos a la unidad para cuidado coronario en un hospital de 197 camas en Seattle durante el primer año de operación. Cinquenta y seis tuvieron infarto del miocardio comprobado y 37 sobrevivieron. Setenta y cuatro tenían otras enfermedades cardíacas y quince no tenían enfermedad cardíaca. Procedimientos de rutina a la admisión incluye administración de oxígeno, colocar el monitor y los electrodes del regulador y la inserción de una canula intravenosa. La operación de la unidad está supervisada por un comité del cuerpo médico pero el cuidado individual de los pacientes está dirijido por el médico del paciente. Se ha hecho necesario un programa continuo de entrenamiento del personal de la unidad. Las enfermeras son entrenadas en un plan coordinado de acción para enfrentarse con emergencias y estan autorizadas a proceder con tratamiento de emergencia cuando sea necesario.

Coronary Care in a Small Hospital

ROBERT L. LEWIS, M. D., Reedsport, Oregon

The excuse of smallness can no longer be used by a hospital to explain lack of a coronary care unit. A 20-bed, community hospital in a small coastal town in Oregon established such a unit with minimal capital outlay and minimal added cost to patients. Success can be attributed to enthusiasm of the medical staff and an excellent training program for nurses.

This report deals with the successful implementation of a coronary care unit in a 20-bed, community hospital. This is unique because:

1. No special ward was needed.
2. No nursing personnel was added.
3. Capital outlay was minimal.
4. The hospital is small.
5. The cost to the patient is minimal.

The Lower Umpqua Hospital in Reedsport, Oregon, a city with a population of 4,000 and a hospital district of 8,000 was able to install its version of the coronary care unit primarily because of its compact physical plant, but also because of progressive attitude of the medical staff and enthusiasm of the nursing personnel.

When it opened in 1964, the hospital purchased a DC defibrillator, a combination oscilloscope-pacemaker and an EKG machine. These were readily adaptable by extending the patient and electrical outlet cables so that the machines could be placed in the corridor outside the patient's room. The medical-surgical ward has 14 beds in eight rooms, which are grouped around the nurses station. Four rooms are readily visible, and the rest are within 15 feet and easy hearing distance of the station. This allows for ready audible and visual observation by the ward personnel, as well as isolating the equipment from the patient. All necessary equipment was assembled on a cart specially built for this purpose and can be moved to the bedside within a few seconds.

The defibrillator was modified by installing a synchronizer at a cost of $400 and a PhonaTrace was purchased for $325. The latter has a dual purpose of allowing us to transmit routine EKG's to a cardiologist in a distant area, and to provide instantaneous advice for whatever cardioversion may be needed. The EKG is also wired in tandem with the oscilloscope to make a permanent record of the chart as well as providing continuous comparisons. We have also recently purchased transvenous pacemaker equipment for internal pacemaking.

Through a series of lectures and practice sessions, every registered nurse and licensed practical nurse on the staff was taught how to recognize and treat ventricular fibrillation and ventricular standstill. I feel that they are capable of making immediate decisions without error regarding these two conditions, because in either situation the patient has suddenly changed to a condition of extremis. I emphasized throughout the training that the patient is dead and that they will certainly not make him any more so. These measures are to be carried out without hesitation before the attending physician is notified. They were also taught to recognize the other arrythmias and to notify the doctor immediately. All treatment, other than the two death producing arrhythmias, is initiated by him. This training was made possible by the manual "Intensive Coronary Care for Nurses" by Meltzer, Kitchell, and Pinneo.[1] Other publications used were the "Current Status of Intensive Coronary Care"[2] and "The Coronary Care Unit".[3] We also used EKG strips sent to us by a cardiologist in Portland, Oregon. As a method of continuing education I have had sessions of a critique nature after interesting patients and have made quizzes out of various arrhythmic EKG strips.

Due to the patient population we will very likely never have more than one acute coronary patient at any one time, and thus duplication of equipment and formation of a separate ward are not needed. Because of the small cash outlay needed and this patient load, the cost to the patient is minimal in comparison to the large units. The added cost is on a per diem for the equipment use only.

To date we have successfully converted three ventricular tachycardias, and our only losses have been patients with secondary congestive heart failure or shock, or both.

We anticipated at the outset some aversion of other patients to the audible alarm system. However, they have readily accepted the need for this and have taken pride in the fact that their hospital can offer this advanced form of protection.

One factor not anticipated has been the speedy delivery of patients, via ambulance, to the monitoring system due to the limited area involved.

Our procedure now is to get the possible coronary patient hooked up to the monitor as soon as he arrives in the hospital. He stays connected while the EKG and other diagnostic tests are run, and if the diagnosis is confirmed, remains on the monitoring system for a minimum of three to five days. During the acute phase, an EKG strip duplicating the monitor tracing is run out of the monitor input every one half to one hour. This is discontinued when the patient's condition is stationary. A PhonaTrace EKG recording is transmitted to a cardiology center on 24-hour standby whenever the physician feels it advisable. This service is available to all members of the medical staff.

If a nurse is caught on the ward alone and needs help, she may push a centrally located bell button that rings in the nursing home area of the hospital. Within one minute the nurses from that area can be on hand, and by the time they arrive, she is able to have the defibrillator at the bedside of the patient and ready to use.

In conclusion, I will state that Coronary Care Units are readily adaptable to any size hospital. I feel that ours is most practical and efficient for the least amount of capital outlay. However, this was made possible by the size of our physical plant, and the nature of its ward.

The training manual of Meltzer, et al, has certainly proven to be a big factor in the successful implementation of this plan. It not only is useful to the nurses, but to the attending physician, with its well outlined information on diagnosis and treatment of the various arrhythmias. Our system has progressed from the treatment to the prevention of the death producing arrhythmias, and many patients have been started on drug therapy who possibly would have died had we not had our continuous monitoring available. I feel all hospitals treating coronary patients should have an acute coronary care system operating and doubt that the excuse of smallness can be used in the future, if indeed it is being used.

summary

A 20-bed community hospital has set up a successful Coronary Care Unit without much capital outlay, which provides the latest treatment for arrhythmias and which costs the patient very little in relation to the larger units. ■

859 View Drive (97467)

abstracto

La excusa de pequeñez no se puede usar por más tiempo por un hospital para explicar la falta de una unidad para el cuidado de casos coronarios. Un hospital de la comunidad de 20 camas en un pueblo pequeño de la costa de Oregon estableció tal unidad con desenvolvimiento mínimo de capital y a un costo adicional mínimo a los pacientes. El suceso se puede atribuir al entusiasmo del cuerpo médico y a un excelente programa de entrenamiento para enfermeras.

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The Necessities and Problems of a Coronary Care Unit

JOHN R. BLACKMON, M.D., Seattle, Washington

A coronary care unit should have ample space, relatively simple but reliable equipment, and should be arranged to permit observation of patients by a single sentry but not by each other. Nurses must be trained in use of the equipment and in all required emergency procedures. Potential reduction in mortality will be achieved by use of the coronary care unit only when care is directed by a physician who is expert in the treatment of the complications of myocardial infarction.

The medical justification for a coronary care unit is the same today as when outlined in a 1959 editorial in this journal entitled, "The Coronary Room."[1] The purpose of this paper, however, is not to add to the long list of publications outlining the need, but rather to discuss the ingredients for a successful coronary care unit and to emphasize the problems in education and communication that have arisen in the development of this specialized facility.

space and design

The total space and unit design will depend on the number of beds in the unit and this depends entirely on the number of cases of myocardial infarction or suspected infarction admitted to the hospital per year.

Each bed should have optimally 150 sq. ft., certainly no less than 130 sq. ft., in order to function effectively. Depending on the number of beds, the unit can be circular, semicircular or, as in a two-bed unit, arranged for side by side placement. The important feature is that each patient should be visible from the nurses' station, which in any design is centrally located. Each room should be enclosed by at least three solid walls. The front should be a partial wall with a sliding, glassed door to make patient observation easy yet insure the patient's privacy. It is mandatory that patients be protected by visual and auditory isolation from emergency situations.

Each patient area should be attractively decorated, have temperature and humidity control, and acoustical tile on the ceiling. A variety of new floor coverings are available to make a comfortable, quiet, and easily cleaned floor. Furniture in the room should be kept to a minimum. A bed, hospital-type table, and possibly a single chair, are the only items that are essential, since the room must be kept functional for emergencies and visitors are necessarily limited in number and time.

Each room should be equipped with oxygen, suction, and adequate electrical outlets, including an emergency power outlet. Neither a wash basin nor a clothes closet in the patient's room is essential for intensive care.

equipment

In any specialized area like a coronary care unit, special equipment is necessary and can be categorized as follows:

Monitoring devices. From a clinical point of view, the electrocardiogram is the most useful parameter and the only one that must be monitored electronically. The basic essentials are an oscilloscope and an alarm system for each patient. Oscilloscopes, one at the nursing station and one in the patient's room, are desirable so abnormalities are observable in both areas, particularly during emergencies when cognizance of the ECG is necessary. It is highly desirable that solid state circuitry be employed in this type of equipment. It increases durability and reliability and also reduces the size of the units. Cables should be in shielded conduits, off the floor when possible.

Defibrillators. The minimum requirement is a DC defibrillator for every three beds. I personally prefer, and have, a defibrillator in each patient room. One of the units is portable, battery operated with a synchronizing unit and pacemaking capability, so cardioversion, defibrillation and pacemaking can be accomplished during emergency transportation of the patient.

Pacemakers. Both external and transvenous pacing is necessary for proper care in the coronary care unit. The external unit is for emergency use until transvenous pacing can be accomplished. The energy supply for the transvenous pacemaker should be battery operated to avoid fibrillation of the patient due to imprope grounding of instruments operating out of wall circuits.

the nurse specialist

The physician cannot be in constant attendance with his coronary patients. Since most private hospitals do not have an adequate number of house staff, others in the health professions must be specially trained for surveillance. The nurse, who has always been at the bedside of the sick patient assisting the physician, is the most reasonable and obvious choice. The average nurse cannot assume this role in her present state of training and knowledge. Nevertheless, with three to five weeks of intensive medical training, highly motivated nurses can assume this task and do it well. They are the keystone for the successful operation of a coronary care unit.

An appropriate curriculum consists of 40 to 60 hours of medical lectures, at least 10 hours of training in resuscitation techniques and 40 hours of practical experience. This course must be taught by a physician, or physicians, knowledgable and experienced in treatment of the complications of myocardial infarction.

administration

Director of the coronary care unit. The director of the coronary care unit should be reasonably expert in the area of clinical coronary artery disease and, with the help of his coronary care unit committee, should outline medically sound policies that will cover all activities of the coronary care unit. He must be strong enough to maintain effectiveness of the unit against encroachment by the hospital administration and practicing physicians. When circumstances arise not covered by policy, the director's decision should be final.

Coronary care unit committee. Since the function of the coronary care unit involves many areas, the coronary care unit committee should include the director of the coronary care unit, a member of the hospital administration, a representative of the nursing services, and the hospital medical director or chief of staff, as a minimum. Others can be included depending on the specific circumstances. Each member of the committee should be authorized to make decisions for his area. With this type of representation on the coronary care unit committee, policies can be developed that will preclude friction at a later date.

The specific areas needing coverage in the policies of the coronary care unit are: 1. Admission criteria, 2. Patient priorities, 3. Length of patient stay, 4. Transfer situations, and perhaps the most important policy item, 5. Delegation of treatment responsibilities to the nurse specialists by the medical staff, including appropriate standing orders. This area, above all, should be outlined with great clarity, down to the smallest detail.

problems

Although the dividend in human lives certainly justifies the concept and organization of coronary care units, problems are evident.

Instrumentation. Unfortunately, physicians have allowed the electronic companies to do their thinking for them and to over-supply units with expensive, bulky, poorly designed extra gadgetry. When contracting for a monitoring system, buy only the essentials and have the company install the unit. In essence, a well-designed system should be purchased rather than bits and pieces which have to be matched to function properly.

Education of the nurse specialist. To convert the nurse to the nurse specialist in coronary care takes, on the average, 40 to 60 hours of physician instruction. At the present time, almost every hospital with a coronary care unit, of necessity, has to train its own nurses. The courses have to be given two or three times each year since the turnover rate of nurses is high. Usually this job falls to a small group of physicians who are keenly interested in coronary artery disease and its complications. At the present time, I am aware of 12 hospitals in which training programs are ongoing features of the nurse specialist's education. This type of isolated training is a tremendously inefficient use of physician time and a solution is available.

Continuing education of the physician. The updating of physicians in this regard is a more difficult problem, since they need a much greater depth of knowledge in their supervisory capacity. Without doubt, a well-trained nurse specialist will be more sophisticated in the recognition and treatment of serious arrhythmias than many physicians in active practice.

The first problem in the education of physicians in this area is to reach them with the proven concept that well-organized coronary care units can reduce the in-hospital mortality by 30 per cent. With this knowledge, certainly all physicians accepting coronary patients, should use the coronary care units in their respective hospitals. Unfortunately, however, this is not the case, and may not be until a few unhappy medical-legal problems arise. For some reason that sort of news circulates through the medical community faster and more completely than does basic medical knowledge.

Another problem is the organization and admission policy of many coronary care units in community hospitals. *Physicians caring for the patient with acute myocardial infarction should be expert in modern, intensive care for only with expert medical care can the mortality be reduced.* Yet in some units, physicans without expertise refuse to release their patients to the expert for even 48 to 72 hours during the critical period. These same physicians do not hesitate to relinquish their patients to an expert surgeon for a pneumonectomy or gastrectomy, which in good hands yield much lower mortalities than does acute myocardial infraction. This is indeed a paradox.

possible solutions

It is conceivable that through an organization like the Regional Medical Program solutions to some of the problems cited may be available. The complexities of monitoring equipment, coronary care unit design and organization might be helped by an advisory committee set up by the Regional Medical Program. This committee could be requested to review any or all of these problem areas in any given community on a consulting basis.

The Washington State Heart Association, in conjunction with the University of Washington School of Nursing, was the first organization in this state to recognize the need to train coronary care unit nurses in adequate numbers on a recurrent basis and to date has partially filled a void. As numbers of units and candidates have increased, this void has become larger and more acute. Although partially overcome, educational programs will require a large budget and large medical faculty.

In response to this demand, the University of Washington School of Nursing undertook to fund a larger program via the Public Health Service and has been successful. Thus, it will be possible to support 100 trainees per year for a course requiring a period of three to four weeks. Since this support is for a one-year period, it is necessary to look for an organization for continuing support. Again, this would fall quite logically under the aegis of the Regional Medical Program.

Continuing education of physicians in this area of coronary care could also be aided considerably by the Regional Medical Program in conjunction with the Continuing Medical Education Program currently operating within the University. The stimulus to bring this about rapidly, in my opinion, must come from pressure from the practicing community for this type of program.

The above problems are common in our State and Region, are pertinent to updating patient care, and involve special training and continuing education of nurses and physicians. Virtually all aspects fall within the philosophy of the Regional Medical Program, and hopefully this need will be met rapidly and effectively by the program developing in our area. ■

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abstracto

Una unidad para cuidado coronario debería tener espacio amplio, equipo relativamente simple pero de confianza y debería arreglarse para que permita la observación de pacientes por un solo observador y no de uno a otro. Las enfermeras deben ser entrenadas en el uso del equipo y en todos los procedimientos de emergencia requeridos. Una reducción potencial en la mortalidad se conseguira usando la unidad para cuidado coronario, solamente cuando el cuidado esta dirijido por un experto en el cuando cuidado es dirigida por un médico hábil en las complicaciones de infarto miocardial.

REFERENCE

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Human Renal Homotransplantation

Part II, Donor-Recipient Selection and Histocompatibility Testing

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Best graft survival rates are obtained when the donor is a living relative. Scheduling problems add to risks when using cadaver kidneys because of prolonged ischemia time. Histocompatibility matching is an essential part of donor selection and a better match is usually obtained when a relative is the donor. Due to the variety of antigens present in cells, and the variations in activity of transplantation antigens, compatibility may vary from complete acceptance of a graft from an identical twin to rapid rejection of one from an unrelated donor. The grade of rejection reaction can be predicted with some degree of accuracy by histocompatibility testing.

Considering the presently experimental nature of renal homotransplantations, the proper selection of recipients and donors assumes great importance if maximal long-term results are to be obtained. It is the purpose of this paper to outline the techniques of recipient and donor selection presently in use at the University of Oregon Medical School Hospitals. Attention will also be given to the present status of histocompatibility testing.

recipient selection

It is estimated that about 25 patients per one million population per year succumb via irreversible chronic renal failure and are potential candidates for chronic dialysis or renal homotransplantation.[1] One should note that chronic dialysis and renal transplantations are complementary and not competing techniques; however, neither the presently available chronic dialysis centers nor the few renal transplantation centers have the personnel or facilities to handle the total number of prospective patients. The ideal situation will eventually arise when it is possible to integrate both techniques and apply them according to the dictates of the individual case. In the meantime, we have no alternative but to choose the most suitable recipient.

The following criteria may serve as a guideline to the practicing physician caring for patients in irreversible renal failure as to the optimal time for seeking consultant advice regarding chronic dialysis and renal homotransplantation:

1. Patients should have irreversible renal disease with life expectancies measured in weeks or months.

2. The primary disease process should be confined to the kidneys as seen with chronic glomerulonephritis, pyelonephritis, polycystic renal disease, hypoplastic kidneys, or injuries to a solitary kidney. Patients with systemic diseases and associated kidney involvement resulting in irreversible renal failure are presently not considered to be good candidates by most transplantation teams. Such conditions include diabetic nephropathy, lupus erythematosus and other collagen diseases, active tuberculosis, and amyloidosis. Patients with acute glomerulonephritis should be carried on chronic dialysis and not be considered for transplantation until the acute phase has passed and antibody titers are low.

It is important that the practicing physician consider the modalities of chronic dialysis and renal transplantation in likely candidates before irreversible secondary complications render the candidate a poor risk for either therapy. It is fortunate, however, that severe cardiovascular, neurological, hematological, and other systemic complications can be reversed or at least expected to regress following chronic dialysis and medical therapy or after successful renal transplantation.

3. Arbitrarily, the patient should be under 50 years of age, intelligent, responsible, and emotionally adaptable to such a major procedure. He should have clear insight into the magnitude of his problem and be fully aware of the investigational status of renal transplantation. It must

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This is the second in a series of four articles on renal transplantation. Part 3 will be published in the August issue.

be recognized that much of the successful outcome of the transplantation procedure will be contingent upon his long-term cooperation and adherence to restricted medical regimen.

4. No chronic source of infection should be present.

5. The urinary tract should be free from obstructive uropathy and sepsis. If urological lesions are present. preliminary consultation is to be sought.

6. Preference has presently been given to cases for whom potential related live donors are available. Blood specimens of recipients and potential donors are submitted for histocompatibility testing (lymphocyte typing, vide infra).

With fulfillment of the above criteria, the patient may be considered for admission to the transplantation center where complete workup and preparation for transplantation are to be accomplished. In general, the same rules apply to the preoperative preparation of these patients as to those undergoing any other major operation, except that the homeostatic and excretory function of the kidneys must be substituted by meticulous preoperative dialysis and medical therapy. In all cases prior to transplantation, the patient will undergo bilateral nephrectomy to reduce hypertension and eliminate foci of renal infection. After complete healing in two to three weeks, transplantation is accomplished when a live donor is available. If a cadaver donor is utilized, the time of transplantation is contingent on acceptable donor availability, with pretransplant dialysis continued as required. The extensive flow sheet utilized in maintaining the recipient while hospitalized before and after transplantation is illustrated in Figure 1.

selection of live and cadaver donors

At our institution, we have favored the utilization of living donors in renal transplantation: but on occasion have performed cadaveric homotransplantation when other acceptable sources were not available. Current data indicate that the best transplantation results obtained thus far have been with living donors in cases involving twins and other closely related individuals. Fifty to sixty per cent survivals beyond one year have been obtained in multiple series utilizing living donors.[2]

While it is frequently possible to obtain a living donor from available candidates, the choice often raises difficult and unprecedented moral, social, and legal questions. After carefully considering and selecting the most satisfactory donor candidate, it is essential that the donating individual be fully informed, emphasizing the personal risks involved and the uncertain outcome of the procedure for the recipient. The responsible family members must be informed and agreeable, and their level of genuine concern thoroughly ascertained. Selecting physicians must make certain that any element of coercion on the possible donor by anxious family members is avoided. At all times, the first responsibility of the selection group is to the donor, and the choice of a given donor should not be made if there are any adverse factors casting doubt on the emotional or physical suitability of the selected individual.

Certain definite advantages are gained with utilization of living donors. The main advantage of a related living donor lies in the high probability of obtaining a good histocompatibility match. The importance of this factor is reflected in far better survival rates of renal grafts obtained from related donors (parents or siblings) than from unrelated donors, as reported in the accumulated world literature.[2] When more than one related donor is available, the chance of a favorable match can be further enhanced by prior histocompatibility testing, which presently is extremely difficult to do in the short time available with cases involving cadaver donors. Other less relevant advantages are the opportunity for optimum scheduling of transplantation between live donor and recipient and the accomplishment of this procedure with reduced ischemia time. Usually, urine output is immediate and hemodialysis is not required postoperatively. When related live donors are not available, one may have to wait weeks or months until a suitable cadaver kidney can be obtained. Even with a most efficient, alert transplant team, the procurement of the cadaver kidney and the emergency preparation of the recipient will not permit time to complete the vascular anastomoses before several hours have elapsed after death of the donor. This prolonged ischemia time will result in more severe tubular damage manifested clinically in periods of oliguria requiring hemodialysis postoperatively. Improved pre- and postoperative management may overcome such difficulties to some extent as evidenced by improved results at certain institutions practicing frequent use of cadaver source

RECIPIENT NAME L.P. AGE 19 SEX F BLOOD TYPE A⁻
TRANSPLANT DATE 11-29 NEPHRECTOMY DATE 11-18 PATHOLOGY glom. nephritis

DONOR NAME M.C. AGE 48 SEX F BLOOD TYPE A⁻
RELATION mother WHICH KIDNEY: RIGHT ✓ LEFT

Proced.		Dial.			Dial.	Transplant			Dial.					Dial.					A.V. shunt out												
Diet							iv fluids →		30g protein, 500mg NaCl →									General diet →													
DATE	Nov	25	26	27	28	29	30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Transfusion		500							500					500																	
Hct		22.5	29.5		27.5		29.5	29.5	29	29		28.8		28.7		31.3			31.5		27.5		26		27 8			24		25	25 5
$WBC \times 10^3$		7.60	7.38	8.2	10.1		12.1	12.9	10.8	7.2	10.4	10.65	7.5	11.1	9.5	5.2	6.8	7.1	6.2	5.2	6.5	8.2	5.6	10.6	9.7	10.3	9 5	6.9	8.1	6 7	9.25
Lymph.Count		20	18		20		10	10	16	16		22		4		4			3		5		24		19					4	8
Plate. / Retic.									adeq			Incr		adeq		adeq					adeq									adeq	
BUN		19	28		49		41	66	97	49		92		135		68			93		92		61		41			39		35	26
S-Cr/U-Cr		13.6										13.8		11.8											$^{1.4}/_{0.94}$			$^{1.2}/_{0.98}$			
C_{Cr}																									47			57			
SERUM	Na	140	143		136	144	119	127	132	141		136		125		132			124		124		133			136		141		140	
	K	5.3	4.2		3.7	4.1	2.7	4.1	4.8	5		5		5.5		4.9			4.7		4.8		4.4			4 9		4.6		4 2	
	Cl	98	99		97	100	104	86	86	89		91		87		88			88		101		111			115		114		98	
	CO_2	26	26		26		22.5	22	24	26		25		24		24.5			27.5		23		25			21		21		20.5	
URINE	Na															16			35.2		72.6		91.2		142.8			244			
	K															28			48.4		52 8		76		81.6			76			
	Cl															24			22		49.5		95		153			231			
	Urea																								14154			15065			
	Protein															trace															
	Osmolality																								310			360			
	Spec. Grav.															1.005															
Co./P																															
Heparin									reg					reg																	
Coumadin																															
P + P											100								100												
Coag. Time										7'				8'	7'																
Renal Size									15.8						15 8						15.6							15.6			
Graft Tender.																															
BP							110/78								108/68						104/70					120/74					122/74
Temp.		98^6	98^4	98	97^6	98	98^6	98				98		98					98								98				98^6
Antibiotics						prostaphlin			250	mg	qid																				
Bact.																															
Actino.																															
Pred.						100	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	100	100	100	80	80	70	70
Imur.				175	175	175	150	150	150	100	150	100	50	50	100	0	12.5	12.5	0	0	12.5	12.5	0	0	25	25	25	0	12.5	0	12 5
Weight								99 1/4	98	96 1/4	97		98 1/2	98 3/4	101 1/4	101 3/4	101 3/4	102 1/2	100 3/4	100 1/2	101 3/4	103 1/4	103	105	105 3/4	106	108 3/4	110 3/4	109 3/4	111	110 1/4
Intake		270	260	710	600	1725	1000	1000	450	610	170	977	1260	735	1535	1600	1940	1390	1710	3170	2885	3500	4210	3600	4020	4475	4025	3685	3110	5170	
Output		0	0	0	0	20	66	66	249	40	95	232	339	195	483	820	1397	2530	2165	2385	3290	3125	3760	2300	3370	2900	2275	3275	4400	3575	

X-ray Th. to graft: 150r 150r 150r 150r

Urine culture: no growth → renogram: normal

Fig. 1. The type of extensive flow sheet utilized in maintaining the recipient before and after transplantation.

renal grafts.[3,4] Table 1 summarizes our criteria for and evaluations of living donor candidates and Table 2 those for cadaver donors.

Our technique of cadaver kidney procurement requires obtaining the organ under sterile conditions with accomplishment of rapid perfusion and cooling to approximately 4C at which point renal tubular cell metabolism is reduced to approximately 5 per cent of that at 37C.[5] We have chosen the following regimen for this purpose: If possible, closed external cardiac massage is instituted and artificial respiration begun immediately after death. Transperitoneal renal exposure is accomplished and the left kidney preferentially removed. The organ is perfused with a solution of 1,000 ml chilled (4C) Ringer's lactate containing 40 mg heparin and 1.0 gm procaine per liter of solution. The kidney is placed in a specially constructed, transportable hyperbaric oxygen cannister under 3 atmospheres pressure and filled with crushed ice. Periods of several hours prior to definitive transplantation may then be tolerated with considerably less ischemic damage.

Table I

Live Donor Selection: Criteria & Routine Evaluation.
(Additional tests are done if indicated).

Criteria:

1. Preference to genetically related individuals.
2. Age less than 50, with evidence of good general health.

Evaluations:

1. Complete history and physical examination.
2. Complete blood count.
3. Chest x-ray.
4. Electrocardiogram.
5. Blood urea nitrogen (BUN), creatinine and creatinine clearance determinations.
6. Blood typing.
7. Electrophoresis of serum proteins.
8. Urinalysis, urine culture and sensitivity.
9. Twenty-four-hour urinary protein excretion if albumin positive in urinalysis.
10. Overnight urinary concentration test.
11. Twelve-hour Addis count.
12. Intravenous pyelography.
13. Retrograde femoral renal angiography.
14. Lymphocyte matching procedures (histocompatibility testing).

histocompatibility testing

A clinically reliable method of donor and recipient histocomptability typing should have an impact in the field of organ transplantation similar to that noted in transfusion therapy with the advent of human erythrocyte blood group typing. Existing data from experiments in inbred mice and leukocyte typing in humans suggest a large number of antigens involved in tissue transplantation. For this reason, the chances of obtaining a donor with perfect antigen-matching to a prospective recipient is extremely small and so far has only been encountered in identical twins. In the transplantation of solid organs, only individual specific transplantation antigens appear to be of clinical significance. These transplantation antigens are present in all nucleated cells of man and mammals. Different tissues of one individual may not differ qualitatively in their content of transplant antigens, but may do so quantitatively thereby possibly explaining the higher observed antigenicity with skin as compared to kidney homotransplants.

Table II

Cavader Donor Selection: Criteria and Eveluation.

Criteria:

1. Age less than 60.
2. Acute death source preferable; such as cerebral trauma or cardiac surgical deaths. Sources must be free of infection, abdominal malignancy, exposure to nephrotoxic drugs, or periods of prolonged shock.

Evaluations:

1. Postmortem permission for specific tissue removal.
2. Antemortem BUN, creatinine, creatinine clearance determinations, if possible.
3. Antemortem urinalysis, urine culture and sensitivity determinations, if possible.
4. Blood type.
5. Gross inspection of kidney, vessels and ureter.
6. Rapid frozen section of kidney specimen in doubtful cases.

Individual specific transplantation antigens vary in strength. Present immunosuppressive methods may succeed in inhibiting several weak and a limited number of intermediate strength or strong antigens present in the donor graft tissues and absent in the recipient, but will fail to suppress a powerful reaction against multiple intermediate strength antigens or certain strong antigenic groups.

After extensive experimental studies certain investigators have now developed typing techniques for human leukocytes.[6] A more promising serologic approach to the tissue typing problem considered below makes the basic assumption that some isoantigenic specificities detectable by in vitro tests on cells utilizing isoimmune sera correspond directly to, or are at least closely related to, differences in antigenic specificities which provoke homograft sensitivity. It is unimportant whether or not the antigens and antibodies concerned are themselves responsible for homograft rejection so long as the antigen detected in some manner serologically corresponds to a histocompatibility gene.[6]

Hamburger, et. al.[7] and others have performed leukocyte typing of donor and recipient according to their reaction in pooled leuko-agglutinating sera obtained from hyperimmune subjects. Re-emphasis is placed in these experiments upon procurement and preparation of a series of monovalent specific antisera, each of which is believed to be capable of recognizing a single leukocyte antigen.

Certain limitations are noted with leukoagglutinating techniques which have led to the leukocyte-matching procedure pioneered by Terasaki[8] and Walford.[9] It consists of donor and recipient lymphocyte isolation followed by reaction with a panel of greater than 100 different cytotoxic antisera obtained from multiparous women, recipients of repeated blood transfusions, or of homografts. Qualitative and quantitative antigenic differences between donor-recipient pairs are then ascertained. When both members of a pair react similarly to an antiserum, or if antigens not represented in the donor are demonstrable in the recipient, a mismatch is not considered present. Antigens present in the donor but not present in the recipient are considered to be complete mismatches. Strong antigens measurable on donor lymphocytes and similar weak antigens in recipient cells are termed partial mismatches.[10] It is presently felt by Terasaki that there are seven major leukocyte groups important in lymphocyte antigen typing.

Selection of the donor is based on two criteria: The lowest percentage of total antisera tested that are mismatches as related to a given recipient and the smallest number groups that are mismatched. Mismatches of high degree are accordingly avoided in choosing acceptable donor-recepient pairs. One of the chief problems presently is the collection and isolation of monovalent antisera against all tissue antigens that are of clinical importance in renal homotransplantation.

It is further noted via lymphocyte antigen matching, that certain members of the donor pool have poor representation of antigens being tested and accordingly might be suitable for many recipients and thereby could be considered universal donors (analogous to Blood Group O). On the other end of the spectrum, a few volunteer donors have lymphocytes possessing many antigens and would be unsuitable donors in most cases. It is further noted that patients possessing many lymphocyte antigens might be called universal recipients and would present no problem in matching (analogous to Blood Group AB). Results of retrospective and prospective testing with unselected donor-recipient pairs indicate that homograft survival can be obtained despite a certain degree of donor-recipient incompatibility of the antigenic systems being studied; however, the chance of achieving a good functional result is much higher in cases where the lymphocyte typing tests indicated a good match.[10]

Related to the problem of histocompatibility testing, one must consider the influence of red blood cell typing on transplantation. Although on multiple occasions, blood group mismatches have been perpetrated with reasonably successful outcomes, it is generally recognized that tissue transfers between donor and recipients of different blood types conform to the general rules which apply to nonmatched blood transfusions.

In conclusion, one must recognize that the number of patients to be treated with the modality of transplantation is necessarily limited and requires careful selection of recipients and of optimal donors. Cooperation of workers in this field is mandatory to assure the widest dissemination of evolving knowledge. All present and future work must be carefully controlled to assist in increasing the success rates obtained. Finally, even with improved methods of donor selection, there remains a great need for further development of agents to inhibit the rejection process which plays a variable role in nearly every instance of organ transplantation. ■

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abstracto

Las mejores ventajas de sobrevivencia de los injertos se obtienen usando como donadores a familiares. Los problemas de programación se aumentan a los riesgos cuando se usan riñones de cadaver debido al tiempo prolongado de isquemia. La igualdad de histocompatibilidad es una parte esencial en la selección del donador

y una mejor igualdad se obtiene generalmente cuando el donador es un familiar. Debido a la variedad de antígenos presente en las celulas y las variaciones en actividad de los antígenos de transplante, la compatibilidad puede variar desde la aceptación completa de un injerto de un mellizo idéntico hasta el rechazo rápido de aquel de un donador no familiar. El grado de la reacción de rechazo se puede predecir con cierto grado de exactitud por la prueba de la histocompatibilidad.

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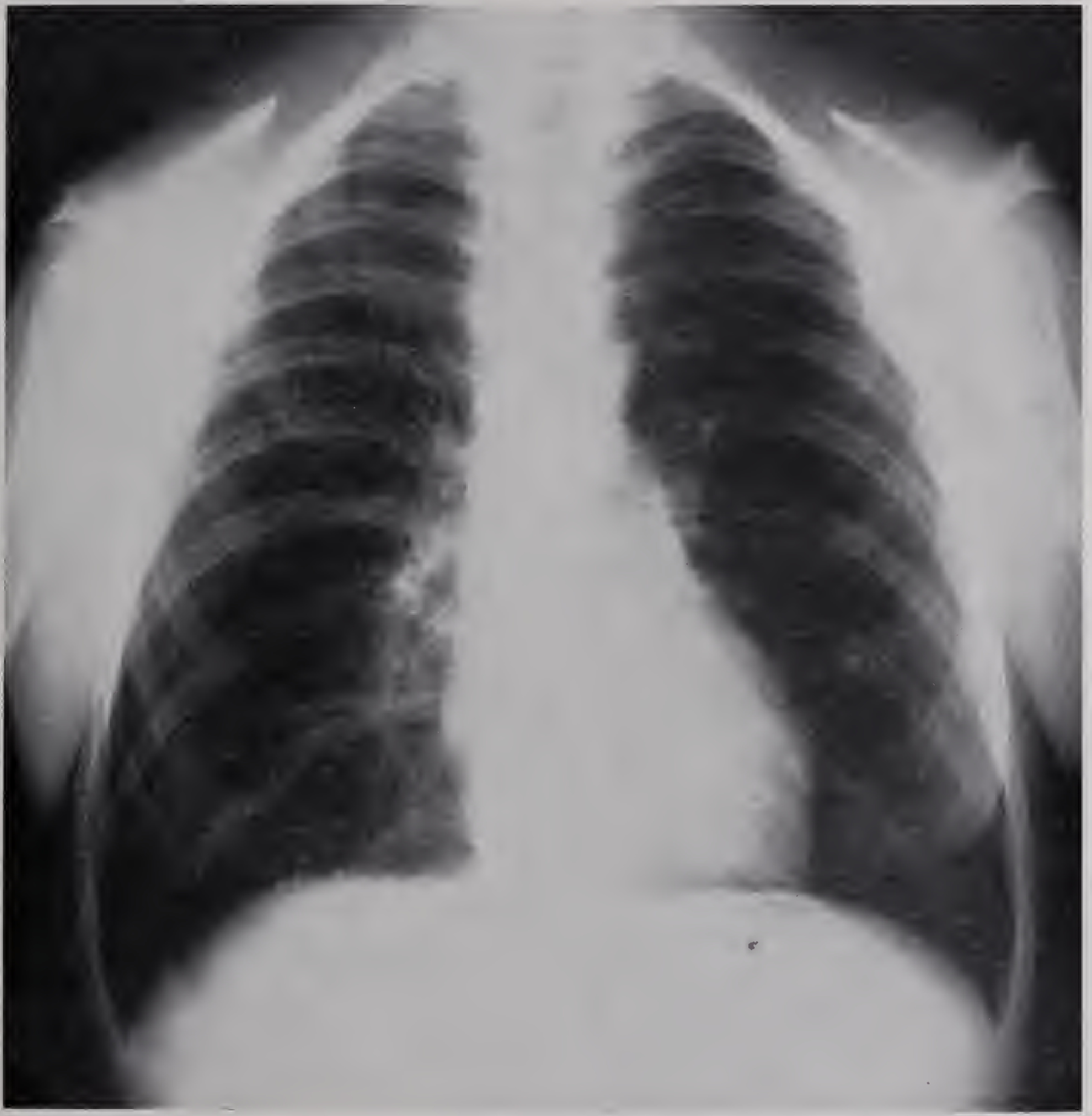
WORDS A LA MODE

Keeping up with the times is an old American pastime, whether in cars whose names snort and snarl—cougar, impala, mustang, jaguar—or in fashionable fads—orange clashing with pink, stripes warring with dots. "The head monkey at Paris puts on a traveller's cap and all the monkeys in America do the same," wrote Thoreau. He went on to observe that, "Every generation laughs at the old fashions, but follows religiously the new." As it is with the sheet metal torturings from Detroit or the rise and rise of hem lines from Carnaby Street so with wordss certain ones come and go with the times. They are vogue words. With a little reflection, one could list a handful: charismatic, matrix, image, factor, impact, ambience, seminal and target (for objective). The eagerness with which academics snap up vogue words may, however, reveal that they are as much the willing victims of herd instincts as those who buy Tempests and Furies and "mod" fashions. For vogue words are "mod-talk." They are used by bright young men of whatever age who would like to be thought "with it." These are some of the words they use to tell you and me that they are "now!"

The Good Writer, Vol. V, No. 6, February, 1967

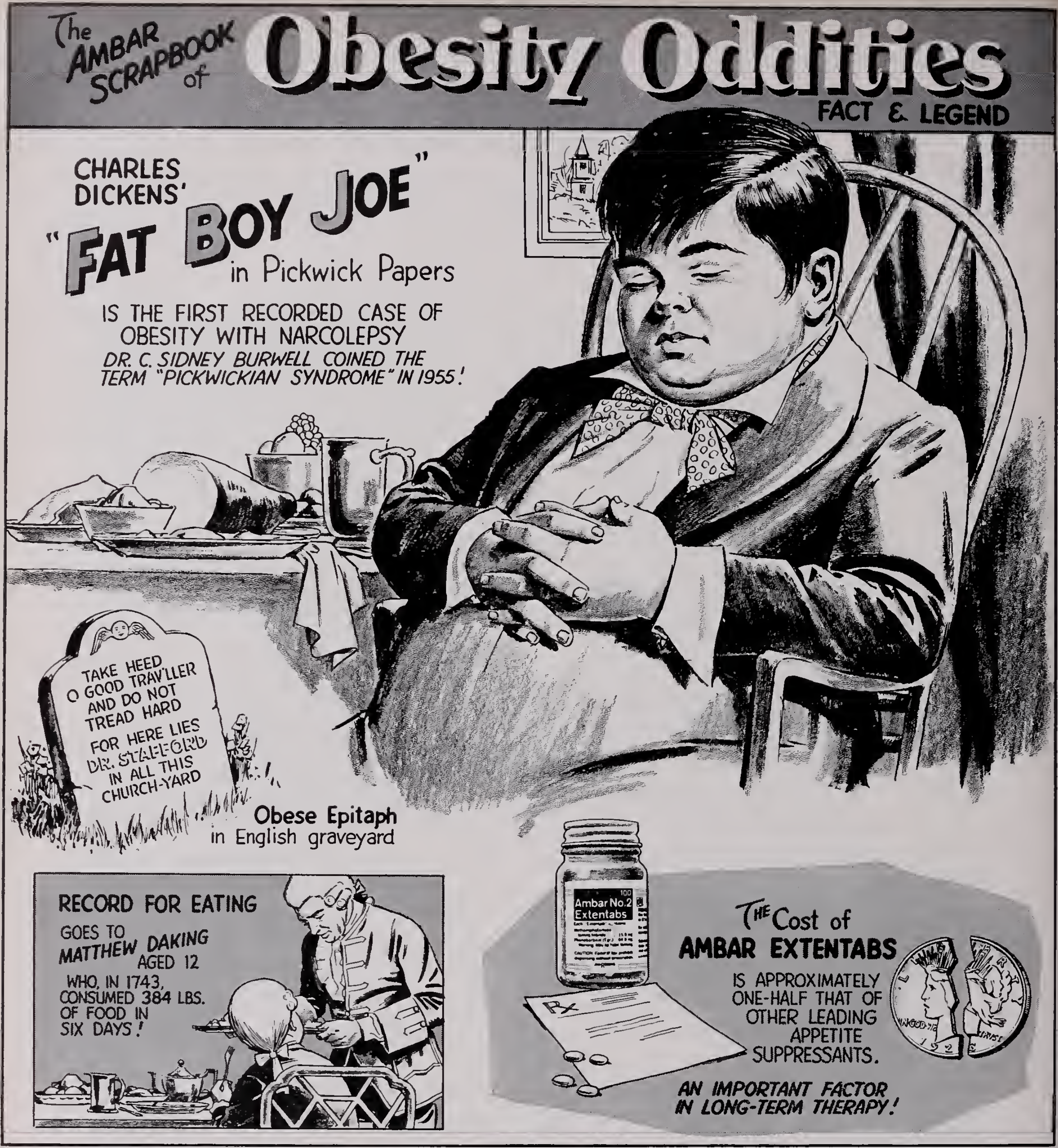
X-Ray of the Month

SUBMITTED BY WASHINGTON STATE RADIOLOGICAL SOCIETY



This 32-year-old female was referred for routine chest x-rays in conjunction with clinical work-up for unrelated problems.

See page 685


The AMBAR SCRAPBOOK of
Obesity Oddities
FACT & LEGEND
CHARLES DICKENS' "FAT BOY JOE" in Pickwick Papers
IS THE FIRST RECORDED CASE OF OBESITY WITH NARCOLEPSY
DR. C. SIDNEY BURWELL COINED THE TERM "PICKWICKIAN SYNDROME" IN 1955!
TAKE HEED O GOOD TRAV'LLER AND DO NOT TREAD HARD FOR HERE LIES DR. STAFFORD IN ALL THIS CHURCH-YARD
Obese Epitaph in English graveyard
RECORD FOR EATING
GOES TO MATTHEW DAKING AGED 12 WHO, IN 1743, CONSUMED 384 LBS. OF FOOD IN SIX DAYS!
100
Ambar No. 2
Extentabs
Rx
THE Cost of AMBAR EXTENTABS
IS APPROXIMATELY ONE-HALF THAT OF OTHER LEADING APPETITE SUPPRESSANTS.
AN IMPORTANT FACTOR IN LONG-TERM THERAPY!

CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.
Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY,
RICHMOND, VA. 23220

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OREGON

Oregon Medical Association —2164 S. W. PARK PLACE, Portland, Oregon 97205

PRESIDENT *John E. Tysell, M.D., Eugene*
SECY.-TREAS. *Alfred C. Hutchinson, M.D., Portland*
EXECUTIVE SECY. *Mr. Roscoe K. Miller, Portland*
Annual Meeting, Sept. 19-23, Portland

Proceedings of Mid-Year Meeting

The Mid-year Meeting of the Oregon Medical Association's House of Delegates was held April 21-22, at the Village Green in Cottage Grove, Oregon. Action voted at the meeting included:

- **clarification of hospital-physician conditions to provide medical service in hospital outpatient departments**
- **recommendation to establish a statewide coordinated renal dialysis organization and program utilizing existing facilities**
- **support of the AMA disability insurance program**
- **adoption of physical screening examination for physicians during OMA Annual Meeting, September 19-22, 1967**
- **support of nursing education programs**
- **giving Section delegates voting power**

The House of Delegates received 16 reports from major standing and special committees and 23 resolutions that were assigned equitably to the three reference committees. In addition, the members of the House of Delegates and guests enjoyed an unscheduled discussion of the situation in South Viet Nam presented by John R. Boe of Grants Pass who had spent the months of December and January in that country as a volunteer physician providing care to the civilian population under the "Project Viet Nam" sponsored by the federal government and administered by the AMA. Dr. Boe held the rapt attention of the delegates for 45 minutes while they waited for the first reference committee report.

AMA-ERF Contribution to Medical School

For sixteen consecutive years the University of Oregon Medical School has received an annual contribution from the Education and Research Foundation and during the last six years the check has been presented to Dean Baird or his official representative during the opening session of the Association's mid-year House of Delegates meeting.

This year the check was presented by Max H. Parrott, Trustee of the American Medical Association, who recalled that it was a resolution adopted by the House of Delegates of the AMA at its 1950 Clinical Meeting which established the AMA-ERF and that Raymond M. McKeown, of Coos Bay, Dr. Parrott's immediate predecessor as AMA Trustee, was president of the Foundation for five years. The check was in the amount of $9,641.07 representing $626.69 in contributions to the Foundation desig-

continued on page 649

O.M.A. Vice President Hance F. Haney received a check for $9,641.07 from Max H. Parrott, Trustee of the AMA. The check represented voluntary contributions from physicians collected by the AMA-Education and Research Foundation. The funds will be used where they are most needed in the teaching program.

A Successful Legislative Session

JOHN E. TYSELL, M.D.

As the busiest legislative year in our history draws to a close, we owe tribute to the many good men and women who have worked so hard to hammer out sound policy positions on many health issues and then effectively present our point of view to the legislators.

You may rest assured that official policy of the OMA is not determined by a little band of willful men. It is the product of hundreds of hours of committee work, debate and resolutions from the component societies, as well as official action of the House of Delegates and the Trustees.

As Speaker of the House, Clint McGill has done an outstanding job in guaranteeing to our members proper and efficient mechanisms of democratic decision-making. As former chairman of the Committee on Public Policy, Clint is thoroughly experienced and has been a key man in determining policy for a number of years. We owe him a debt of gratitude.

Policy of the OMA is normally set by the House of Delegates or the Board of Trustees after study and recommendation of an appropriate committee. During a legislative year nearly all issues are further studied by our Public Policy Committee. Don Kelly, Roy Payne, and the entire committee have literally spent hundreds of hours studying some 175 legislative proposals relating to health care submitted to the legislative session. But when policy has been approved their work has just begun. They must appear before committees, button-hole legislators and see that our point of view is properly presented. The record will show that they have done a fine job for the OMA and the people of Oregon.

Finally, we must pay tribute to John Misko our legislative representative. The recognized "Dean of the Lobbyists," John has the ear and total respect of every person in government that I know. All in all we have had a sound policy program and a great and hard-working team in 1967. ■

John E. Tysell M.D.

CLINTON S. MCGILL, M.D.

ROY A. PAYNE, M.D.

DONALD F. KELLY, M.D

continued from page 647

nated for the University of Oregon Medical School and $2,814.38 representing the School's share of undesignated contributions. The check brings the total amount received from the Foundation by the University of Oregon Medical School to $189,622.00.

Hance F. Haney, Professor of Medicine at the University of Oregon Medical School and Vice-President of the Association, accepted the check on behalf of Dean Baird. Dr. Haney emphasized that this annual contribution from the Foundation is especially welcomed inasmuch as the funds are not earmarked which permits the Dean to use them where they are most needed in the teaching program.

Report of AMA Trustee

Dr. Parrott appeared before the House of Delegates to discuss his experiences as a member of the Board of Trustees of the AMA during the past 10 months. It will be remembered that Dr. Parrott was elected to the Board of Trustees at the 1966 annual meeting of the AMA to fill the position held by Dr. McKeown of Coos Bay, who after nine years of service on the Board was not eligible for reelection.

Dr. Parrott emphasized that he is continuing to hold fast to the principle upon which he was elected that the private practice of medicine is the most effective, efficient and economical means of distributing high quality medical care and service based on scientific principles to the greatest number of people. From this position he reviewed the actions of the Board of Trustees of the AMA since his election to that body on June 30, 1966. He stressed the need for holding a firm line against government encroachment in medical care at the local and state scene as well as on the national level.

Title XVIII, Part "B" in Oregon

"There was no marked acceleration in physicians' fees after Medicare came into effect on July 1;" Mr. A. G. "Bud" Lindstrand constructed his address on the "Cure for Socialized Medicine" around the above statement by Secretary Gardner of the Federal Department of Health Education and Welfare in his "Report to the President on Medical Care Prices."

Mr. Lindstrand who is the Medicare Claims Administrator for Oregon for the Aetna Life Insurance Company, the carrier of Part B Section of Title XVIII in this State, gave the members of the House of Delegates a comprehensive report on the experience in Oregon under Medicare.

Mr. Lindstrand reported that in Oregon as across the nation there had been no increase in physicians' fees which could be directly attributed to the advent of Medicare on July 1, 1966. He also told the House of Delegates that only a very small percentage of claims represented physicians' charges which could be considered as above reasonable levels. These claims he stated were being resolved without difficulty through the use of medical consultants in each medical community or medical review committees established for this purpose. Mr. Lindstrand's conclusions were that health insurance companies and prepayment plans were demonstrating their ability to administer the Medicare program not only in the best interests of the patient and physicians and other providers of service but also to the financial advantage of the government which is paying the "bill". The ability to achieve this quality of performance, he declared, arises from the rich experience gained

Mr. A. G. "Bud" Lindstrand, Medicare Claims Administrator for Oregon for the Aetna Life Insurance Company, addressed the OMA's House of Delegates on the topic, "The Cure for Socialized Medicine."

Edward L. Stevenson, from The Dalles and Chairman of the Board of Trustees of Oregon Physicians' Service, presented the annual OPS report at the mid-year meeting of the OMA's House of Delegates. Also pictured are John E. Tysell, president of the Oregon Medical Association and Mrs. William V. Zartman, current president of the Woman's Auxiliary to OMA.

during the phenomenal growth of voluntary health insurance in recent decades and therefore health insurance companies and prepayment plans offer the strongest bulwark against expansion of government into the fields of medical care.

Election of Nominating Committee

The Association's Bylaws provide that at the mid-year meeting of the House of Delegates if such a meeting is held or at the May meeting of the Board of Trustees a Nominating Committee of five shall be elected to make recommendations for the officers of the Association to be elected at the next following annual meeting. At this year's mid-year meeting, the following seven members of the House of Delegates were nominated from the floor: John W. Bussman, Portland; Louis O. Machlan, Jr., Portland; Edward N. McLean, Oregon City; Joseph L. Miller, Portland; Clay A. Racely, Eugene; Raymond M. Reichle, Portland; and James H. Seacat, Salem.

By written ballot the following were elected: John W. Bussman, Chairman; Louis O. Machlan, Jr., Clay A. Racely, Raymond M. Reichle, and James H. Seacat.

The Committee held a preliminary meeting on the morning of Saturday, April 22, and held its first regular meeting on Thursday, May 25, at the Association headquarters office. The Committee will solicit recommendations for president-elect, vice-president, secretary-treasurer, speaker of the House of Delegates, delegate and alternate delegate to the AMA and member of the Committee on Publications from members of the House of Delegates and the presidents of component societies.

Other Actions of the House of Delegates report of reference committee "A"

Reference Committee "A" was composed of Richard E. Turner, Springfield, Chairman; Louis O. Machlan, Jr., Portland; William C. Scott, Portland; A. G. Tanaka, Ontario; and Charles M. Lindsay, North Bend. This Reference Committee was assigned nine standing and special committee reports and six resolutions. Primarily this Reference Committee received all reports and resolutions relating to medical service including any discussion of the "usual and customary" fee principle and several items of miscellaneous business. The Committee's recommendations and the actions of the House of Delegates upon them follows:

Part I

Mrs. William V. Zartman of Beaverton, president of the Association's Woman's Auxiliary, presented an oral report in which she discussed in detail the three major projects of the Woman's Auxiliary for the current year. She reported that the local Woman's Auxiliaries had collected an increased volume of drug samples from physicians' offices for shipment to needy nations through Direct Relief of Santa Barbara, California, that the Auxiliary had established a Med-Aux Park Corporation on a non-profit basis to receive tax deductable contributions to build and equip playgrounds for institutions for handicapped children and that a second Med-Aux Park would be established in Salem, Oregon, at the time of the Auxiliary's 1967 annual meeting; and that the State Woman's Auxiliary and the Med-Aux Park Corporation were joining in the promotion of the registered rose known as the "Doctor's Wife," the contributions for which were being used by the Med-Aux Park Corporation to continue the establishment of playgrounds for handicapped children.

Reference Committee "A" at the mid-year meeting of the House of Delegates. The major function of the committee was to receive all reports and to make recommendations concerning medical service. Members of the Committee, from left to right, are Charles M. Lindsay, Bend; A. G. Tanaka, Ontario; Richard E. Turner, Springfield; chairman William C. Scott, Portland; and Louis O. Machlan, Jr., Portland.

The Reference Committee recommended that the House of Delegates express its appreciation to the Association's Woman's Auxiliary and that the oral report of its president be accepted. The recommendations of the Reference Committee were adopted.

Part II

Edward L. Stevenson of The Dalles, Chairman of the Board of Trustees of Oregon Physicians' Service, presented a written annual report of Oregon Physicians' Service affairs including its financial status, its subscriber enrollment and physician membership. Dr. Stevenson also commented extensively upon each of the three aspects covered in the report.

With respect to the annual report on OPS and related matters, the Reference Committee submitted the following recomendations which were adopted:

> 1. That the annual report of the Board of Trustees of OPS be accepted and that the members of the Board and the physician membership be commended.
> 2. That OPS provide for a periodic review of its application of the "usual and customary" fee principle.
> 3. That OPS be encouraged to adopt a principle of automatic review of cases of any variation with the "usual and customary" fee principle as it applies to OPS affairs generally and more specifically to the dependents' military medical care program.

continued on page 652

Overweight problem?

Pat, this was taken Aug 1962

This is your mother,
Picture taken May 26, 1963
Love Mom

These are photographs borrowed from the files of a Missouri physician. The grossly overweight patient pictured in August 1962 succeeded in shedding 110 pounds in the following ten months by adhering to a diet program under the supervision and encouragement of her physician. To help control her desire for food and also "burn off" additional calories, the physician recommended Obestat, one tablet a day. Doctor and patient admit that Obestat fortified her determination to stick to the diet during the difficult weeks of adjustment.

Obestat can help your overweight patient break the eating habits that cause obesity.

Obestat suppresses appetite.

Obestat boosts metabolism.

Obestat offsets emotional symptoms.

Each OBESTAT TY-MED* tablet or capsule contains: Methamphetamine hydrochloride 10 mg./Amobarbital (Warning, may be habit forming) 60 mg./Thyroid 150 mg.

*Lemmon brand of timed-release medication.

Dosage: One Obestat Ty-Med tablet or capsule daily, taken before breakfast, is satisfactory for most patients. Occasionally, 2 tablets or capsules may be required.

Side Effects: Side effects such as headache, dizziness, nervousness, excitability, insomnia, dyspnea, palpitation or gastrointestinal distress are infrequent and usually mild.

Precautions: An increase in blood pressure or basal metabolic rate should be observed carefully.

Contraindications: Myocardial or coronary disease, diabetes, marked hypertension, hyperthyroidism or idiosyncrasy to the ingredients.

Supplied: Bottles of 30, 100 and 1000 tablets or capsules.
Caution: Federal law prohibits dispensing without prescription.

References: Ort, F.: Adjuvant treatment of obesity with an anorectic-calorigenic agent, Clin Med 70:1999 (Nov) 1963. Isenberg, C. L.: Treatment of the overweight patient in general practice, Clin Med 72:663 (Apr) 1965. ©1966 HAACK 1-66 MADE IN U.S.A.

HAACK LABORATORIES, INC.
DIVISION OF LEMMON PHARMACAL CO., PORTLAND, OREGON 97208

Obestat helps.

continued from page 650

Part III

The report of the Oregon Medical Political Action Committee, presented by Chairman Merle Pennington of Sherwood, reviewed briefly the Committee's successful experience during the 1966 elections and told of continued growth during the current non-election year. The drive to establish district political action committees was emphasized by Dr. Pennington as well as the plan to develop one day precinct action workshops throughout the State and the publication of a newsletter to be known as the OMPAC-AGE. The Reference Committee recommended that the report of the Oregon Medical Political Action Committee be accepted and that the House of Delegates recommend continuing and expanding support for OMPAC and its programs among Oregon physicians. The recommendation of the Reference Committee was adopted.

Part IV

The report of the Council on Medical Education contained a comprehensive review of the Council's activity since its establishment by the House of Delegates at its 1966 annual meeting. The report recommended that the House of Delegates approve the amendment contained in the report of the Committee on Revision of Articles of Incorporation and Bylaws with respect to the establishment of the Council.

The Reference Committee recommended the adoption of the report of the Council on Medical Education and the recommendation contained therein. The recommendation of the Reference Committee was adopted.

Part V

The Report of the Committee on State Industrial Affairs contained the following recommendations:

1. That the Oregon Medical Association through its Committee on State Industrial Affairs and any other appropriate committees assume a more active role in the rehabilitation of the injured workman.

2. That physicians be given options as follows with respect to compensation for services to injured workmen at the scene of the accident:

   a. Service plus $1.20 per mile one way; or:

   b. Service plus 15 cents per mile both ways plus the fee for assistant-at-surgery computed on an hourly basis for time out of office, for visit to scene of injury.

3. Payment of fees for prolonged detention with patient includes ordinary care procedures.

4. That fees for neurosurgeons and orthopedists during combined laminectomy and fusion operations assumes that the surgeons assist each other at these operations and that additional assistant's fees not be allowed.

5. That the following recommendations with respect to compensating physicians for the care of injured workmen be approved:

   a. That the following policy with respect to services performed by hospital employed emergency department physician be adopted:

      (1) That such physician be compensated only for the service he performs;

      (2) There shall be only one first visit fee paid.

   b. That Rule 24 of the Workmen's Compensation Board which reads as follows: "In all flat fee cases where subsequent care is rendered by one other than the major treating physician, the services rendered by the second physician must be deducted from the flat fee but not in excess of 30 per cent of the flat fee"; be revised in more flexible language to be in keeping with present practice of employing physicians to cover hospital outpatient emergency departments.

   c. That the subject of the responsibility and scope of practice of the hospital employed outpatient department physician be referred to other appropriate committees of the Association for consideration and recommendation to the House of Delegates.

The Reference Committee recommended that the recommendations of the Committee on State Industrial Affairs be amended by referring recommendation 5a (2), which reads "There shall be only one first visit fee paid," to the Committee and that the report then be adopted as amended.

The House of Delegates adopted the recommendation of the Reference Committee with respect to the report of the Committee on State Industrial Affairs.

Part VI

The report of the Committee on Charitable Medical Care contained the following three recomendations which were adopted:

1. With respect to the Association's position on the application of the "usual and customary" fee principle to the State Public Welfare Medical Aid program that the following resolution be adopted:

WHEREAS, the House of Delegates of the Oregon Medical Association has repeatedly enunciated the principle that the officers of the Oregon Medical Association shall not negotiate terms for remuneration of physicians for professional services to beneficiaries of any governmental agency on other than the basis of usual and customary fees: and,

WHEREAS, the medical care program of the State Public Welfare Commission has functioned during the current biennium in the absence of any agreed schedule of fees; and,

WHEREAS, officials of the State Public Welfare Commission have announced there intention to abolish the fixed fee schedule currently employed by the Commission and to pay fees for physicians' services on the basis of usual and customary fees: and, WHEREAS, the projected estimates of claims costs and available funds are said to allow the payment of such fees during the transition period on the basis of 80 per cent of usual and customary fee levels; and,

WHEREAS, both the Oregon Medical Association and the Commission are badly in need of accurate data concerning usual and customary fees as they apply to Welfare recipients; now

THEREFORE BE IT RESOLVED, that the Public Welfare Commission is commended for taking the initial step to effect the change-over to the usual and customary fee principle; and,

BE IT FURTHER RESOLVED, that those physicians who provide medical services to recipients of the programs of the State Public Welfare Commission be urged to submit their usual fees for such services; and,

BE IT STILL FURTHER RESOLVED, that each physician be requested to furnish duplicate copies of billings for services to Welfare beneficiaries to the office of the Oregon Medical Association for the purpose of an independent audit.

2. That in those counties where federal funds are to be used in paying the cost of hospital and physicians' services for migrant laborers the arrangements for payments of physicians' services shall be a subject for discussion with the component medical society or with the local group of physicians involved in the provision of such services and that such component societies or local medical communities be urged to develop arrangements for compensating physicians under the migrant labor project in accordance with the principle of "usual and customary" fees.

3. That the State Public Welfare Commission be requested when seeking an independent evaluation for the determination of eligibility for permanent and total disability benefits to do so after consultation with the attending physician.

With respect to the report of the Committee on Charitable Medical Care the Reference Committee "A" submitted the following recommendations:

1. That the recommendations contained in the report of the Committee on Charitable Medical Care be adopted.

2. That the Committee on Charitable Medical Care be authorized to assume a more flexible position during this transitional period in the implementation of a new program under the "usual and customary" fee principle.

3. That the House of Delegates reaffirm the ethical principle that no patient shall be denied medical care solely on the basis of ability to pay.

Part VII

The report of the Committee on National Policy contained the following recommendations with respect to the provisions of H.R. 5710, the "Social Security Amendments of 1967" now pending in Congress:

1. That the provisions of Title XIX and Part B of Title XVIII of Public Law 89-97 be amended to provide that payment be made for physicians' services when an itemized bill is offered either by the physician or the patient at the choice of the physician.

2. That the proposed amendment to Public Law 89-97 which would include the disabled below the age of 65 in the Medicare Program be vigorously opposed.

3. That the OMA support generally the recommendations of the AMA with respect to its testimony on H.R. 5710.

4. That the members of the Association and its Woman's Auxiliary inform their respective Representatives in Congress and especially Representative Al Ullman of the Second Congressional District who is a member of the Ways and Means Committee of the House of Representatives regarding the Association's views and urge other citizens to express similar points of view.

The recommendations of the Committee on National Policy and the Association's endorsement of the position of the AMA with respect to H.R. 5710 were adopted.

Part VIII

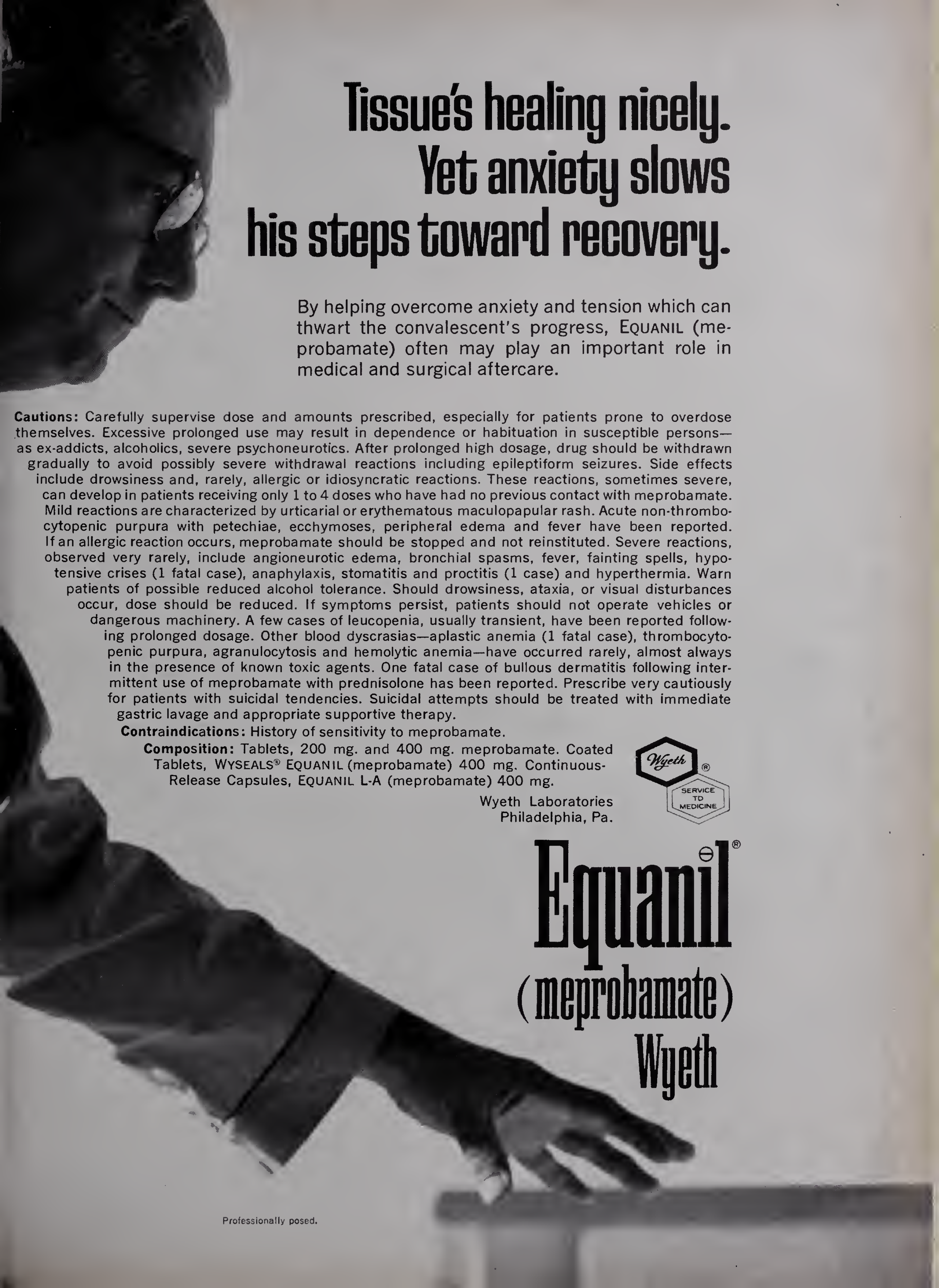
The report of the Committee on Oregon Medical History outlined the Committee's activities and program for implementing the Centennial Observance of Medical Education in Oregon which began with the unveiling of the Bertha Hallam portrait at the University of Oregon Medical School Library Auditorium on Friday, March 3, 1967. In addition to the formal report of these activities the Committee distributed to each delegate a copy of "Men and Milestones in Medicine," a reprint from *Northwest Medicine* which tells the story of 100 years of medical education in Oregon and which was written by Mrs. Thelma Wilson, a member of the Public Affairs Staff at the University of Oregon Medical School.

The Reference Committee recommended and the House adopted that the report of the Committee on Oregon Medical History be accepted and that E. G. Chuinard, Chairman of the Committee and all members of his Committee be especially commended for its excellent work in fostering the centennial observance of medical education in Oregon.

Part IX

The report of the Committee on Federal Medical Services commented upon the arrangements which have been made through OPS with the U.S. Veterans Administration for the application of the "usual and customary" fee principle for services rendered to

continued on page 656



Tissue's healing nicely. Yet anxiety slows his steps toward recovery.

By helping overcome anxiety and tension which can thwart the convalescent's progress, EQUANIL (meprobamate) often may play an important role in medical and surgical aftercare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If an allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leucopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories
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Wyeth®
SERVICE TO MEDICINE

Equanil®
(meprobamate)
Wyeth

Professionally posed.

continued from page 653

veterans with service-connected disabilities and also the application of the principle of compensating physicians for services rendered to the dependents of military personnel and presented the following recommendation:

> 1. That a tabulation of billings which exceed the top allowable payment for medical service provided to military dependents be made and at least annual review by this Committee to evaluate need of additional fee negotiations be authorized.
>
> 2. That billings which exceed top allowable payment be submitted to a medical review committee before issuing discounted payment.

The Reference Committee recommended and the House adopted the report of the Commitee on Federal Medical Services be accepted and that OPS be encouraged to initiate an automatic review of those cases in which the physician's charges under either the Veterans Administration program for the Home Town Care of Service Connected Disabilities or the Dependents of Military Personnel exceed what is considered to be within the range of "usual and customary" charges under the Veterans Administration program or the "top limit" established by the Office of Military Dependents Medical Care.

Opening remarks at the mid-year meeting of the Oregon Medical Association's House of Delegates were made by President John E. Tysell of Eugene. Also pictured above are Clinton S. McGill, Speaker of the House and Max H. Parrott, Portland, trustee of the AMA.

Part X

Resolution No. 4 introduced by the Yamhill County Medical Society and relating to uniform insurance report forms read:

> THEREFORE BE IT RESOLVED that the Oregon Medical Association and its proper committees be instructed to redouble its effort in securing a form that is similar in format to the above insurance forms and that such a form be acceptable by all insurance carriers.

The Reference Committee called the attention of the House of Delegates to the fact that the AMA in cooperation with the National Health Insurance Council had adopted a uniform health insurance report form which was being used by approximately 95 per cent of the companies writing voluntary health insurance and that the form was available in quantity through the Association's headquarters office. The Committee therefore recommended that the resolution not be adopted. The House of Delegates adopted the recommendation of the Reference Committee.

Part XI

Resolution No. 8 introduced on behalf of the Oregon State Board of Medical Examiners related to the dangers of excessive alcoholism and drug addiction among physicians and read as follows:

> THEREFORE BE IT RESOLVED that the Federation of State Medical Boards of the United States initiate a comprehensive, nationwide program to inform physicians of the frequent occurrence and the danger of the excessive use of alcohol; the danger of the habituation to amphetamines, barbiturates and other drugs; and the danger of narcotic addiction in physicians who use narcotics in self-medication; and,
>
> BE IT FURTHER RESOLVED, that the Federation enlist the participation of appropriate educational and professional schools and colleges, as well as hospitals and clinics, in their postgraduate educational programs, to emphasize to medical students, interns, residents and fellows the danger of the excessive and frequent personal use of alcohol, barbiturates, amphetamines and other drugs, and especially the danger of narcotic addiction in physicians who use narcotics for self-medication; and,
>
> BE IT STILL FURTHER RESOLVED, that the AMA offer and provide all possible encouragement and assistance in fostering this important professional education activity.

The Reference Committee recommended that Resolution No. 8 be adopted and that knowledgeable individuals be prepared to testify before the Reference Committee of the House of Delegates of the AMA to which the resolution is referred. The recommendations of the Reference Committee were adopted by the House.

Part XII

Resolution No. 12 introduced by the Committee on Public Policy related to the recommendation that the assumption of individual responsibility be included among the eligibility requirements under Title XIX of Public Law 89-97 and reads as follows:

> THEREFORE BE IT RESOLVED that the Oregon Medical Association in relationship to Title XIX implementing programs within the State declare itself to a program of medical assistance predicated on the annual

> income of the family unit and the number of individuals dependent on that income and on the institution of a system of graduated deductible and co-insurance cost-sharing mechanisms to determine eligibility for said Title XIX program, and,
>
> BE IT FURTHER RESOLVED, that the intent of this resolution and the mechanisms for implementing its principles be presented to the 1967 annual meeting of the House of Delegates of the AMA for the expressed purpose of negotiating with the Department of Health, Education and Welfare in Washington, D.C.

The Reference Committee recommended that Resolution No. 12 be amended by changing the title so as to read, "Institution of a system of graduated deductable and co-insurance cost-sharing mechanisms," and adopted as amended. Adopted.

Part XIII

Resolution No. 14 introduced by the Multnomah County Medical Society expressing opposition to medical participation in governmental medical care programs read:

> THEREFORE BE IT RESOLVED, that, the AMA not encourage or support the participation of county, component or constituent medical societies in the institutional and corporate practice of medicine; and,
>
> BE IT FURTHER RESOLVED, that, medical societies be discouraged from seeking federal grants for these purposes; and,
>
> BE IT STILL FURTHER RESOLVED, that the Oregon delegation to the AMA be instructed to introduce the above resolution to the June, 1967, Annual Convention of the AMA House of Delegates in Atlantic City, N.J.

The Reference Committee recommended that the resolution be adopted but that the Association's delegates to the AMA consult with the Committee on Public Relations and the Association's legal counsel prior to introducing the resolution at the 1967 annual meeting of the AMA House of Delegates. Adopted.

Part XIV

Resolution No. 18, introduced by Jack E. Battalia, delegate from the Multnomah County Medical Society, in a semi-humorous yet serious vein, criticized the officers of the Association who established important meetings in conflict with the opening day of the fishing and hunting season. The resolution proposed that "any business conducted on those days will be declared null and void" and recommended severe physical punishment for those responsible for establishing such dates for such meetings.

The Reference Committee recommended that the officers of the Association follow careful planning in order to avoid conflict with other important dates and meetings but that the recommendations contained in Resolution No. 18 not be adopted. The recommendations of Reference Committee "A" with respect to Resolution No. 18 were adopted.

Part XV

Resolution No. 23 introduced by the Klamath County Medical Society, which recommended that the Association oppose restrictions on the sale of firearms as proposed in S.B. 1 now pending before the 90th Congress, reads:

> WHEREAS, the effective practice of the art and science of medicine is dependent upon a free and stable social structure; and,
>
> WHEREAS, the free access to firearms and the unencumbered right to own and use them in a reasonable manner has been the right of American citizens since the time of the first colonists; and,
>
> WHEREAS, criminals cannot be deterred from crime by restricting the rights of law abiding citizens; and,
>
> WHEREAS, certain types of firearms that are most useful to criminals are already strictly regulated by law and the sale of firearms to felons is prohibited; and,
>
> WHEREAS, the widespread ownership of firearms by *responsible* citizens is a deterrent to crime and does contribute to the stability of our society by helping to guarantee that the form of our government is by the consent of the governed; now,
>
> THEREFORE, it is neither necessary nor desirable to further restrict access to firearms nor interfere with their use by responsible citizens.
>
> BE IT THEREFORE RESOLVED, that the House of Delegates of Oregon Medical Association is strongly opposed to any legislation further restricting the sale, transportation or ownership of firearms. Moreover, the executive secretary of the Association is hereby instructed to notify each Senator and Representative of the Oregon Congressional Delegation of this action.

The Reference Committee recommended that Resolution No. 23 be rejected but that individual members of the Association be urged to make their personal views known to the members of the Oregon Congressional delegation.

The House of Delegates voted to amend the recommendation of the Reference Committee by substituting the words "that no action be taken on Resolution No. 23" be substituted for the words "that Resolution No. 23 be rejected" and then adopted the recommendation of the Reference Committee as amended.

report of reference committee "B"

Reference Committee "B" was assigned the report of the Committee on Public Policy which related to legislative proposals affecting medicine and the public

continued on page 659

In peptic ulcer... antacid therapy with a new benefit

CONTAINS A BALANCED COMBINATION OF THE MOST WIDELY USED ANTACIDS—FOR RAPID NEUTRALIZATION. PLUS SIMETHICONE—TO CONTROL THE FACTOR WHICH ANTACIDS ALONE CANNOT INFLUENCE.

Mylanta®

- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
- The nonfatiguing flavor and smooth, nongritty consistency of tablets and liquid encourage continued patient cooperation during long-term therapy.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.

Stuart

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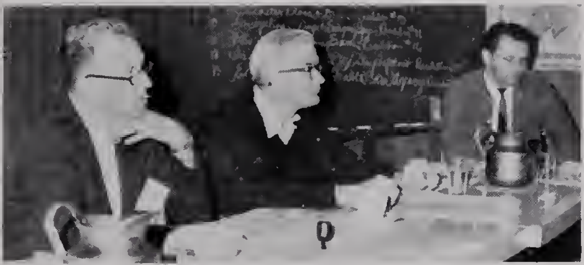


Considering all reports relating to state and federal legislation was Reference Committee B. Members of the Committee pictured above are Werner E. Zeller, Portland, Chairman of the Committee; J. Gordon Grout, Portland, and Mr. Robert O. Bissell, Associate Executive Secretary of OMA. Other members of the Committee were E. Fred Brautie, Corvallis; E. Hume Downs, Salem; and Frank White, Burns.

health being considered by the 1967 Legislative Assembly and any other committee reports and resolutions which were concerned in any way with State and federal legislation. The Committee also was assigned a number of miscellaneous reports and resolutions. Its membership included Werner E. Zeller, Portland, Chairman; Fred Brautie, Corvallis; E. Hume Downs, Salem; J. Gordon Grout, Portland; and Frank White, Burns. The following is a summary of the Reference Committee's recommendations and the action of the House of Delegates upon them.

Part I

The report of the Committee on Disaster Medical Care summarized the discussions and recommendations arising from the Regional Conference on Disaster Medical Care sponsored by the American Medical Association and held in St. Louis, Missouri in February of 1967 and the National Conference on Emergency Medical Service also sponsored by the AMA and held in Chicago in early April.

The Committee on Disaster Medical Care likewise submitted the following three resolutions:
Resolution No. 9

> THEREFORE BE IT RESOLVED, that the Oregon Medical Association strongly endorses the outstanding work of professional and volunteer ambulance personnel who have saved many lives; and,
>
> BE IT STILL FURTHER RESOLVED, that the Oregon Medical Association urges each county medical society to counsel with local rescue and ambulance services to help make available instruction in rescue, resusitation, splinting, and transportation techniques; and,
>
> BE IT STILL FURTHER RESOLVED, that this Association commit itself to a continuing effort in this field to achieve and maintain ideal rescue service in all areas of Oregon, both metropolitan and remote.

Resolution No. 10

> BE IT FURTHER RESOLVED, that the Oregon Medical Association urges each county society to devote one program each year to some phase of preparedness for natural disasters; and,
>
> BE IT FURTHER RESOLVED, that the Oregon Medical Association encourage each local society to undertake responsibility for the maintenance and constant revision of the hospital and community medical disaster plan and for a drill involving the hospital and rescue workers outside the hospital on at least a yearly basis.

Resolution No. 11

> THEREFORE BE IT RESOLVED that the Oregon Medical Association approves this proposal insofar as it will make available to community hospitals stock piles of essential drugs and intravenous fluids and emergency equipment to care for large numbers of casualties in the event of major disasters destroying communications.

The Reference Committee recommended that the report of the Committee on Disaster Medical Care be accepted and that Resolution No. 9, 10 and 11 be adopted. Adopted.

Part II

Resolution No. 16 introduced by the Multnomah County Medical Society and which related to the physical screening examinations being offered physicians at the 1967 Annual Session reads:

> THEREFORE BE IT RESOLVED, that all Oregon physicians be encouraged to take advantage of the physical screening examinations offered by the Multnomah County Medical Society during the September 20-22, 1967, annual meeting of the Oregon Medical Association.

The Reference Committee recommended and the House adopted Resolution No. 16.

Part III

Resolution No. 19 introduced by the Clackamas County Medical Society recommended as follows:

> THEREFORE, BE IT RESOLVED, that the Oregon Medical Association recommend to the Oregon State Board of Health that the isolation procedures be reworded to apply only to epidemics and to specifically exclude sporadic cases of streptococcal infections as regard to isolation procedures as outlined by the Infectious Disease Committee of the American Acadamy of Pediatrics and the American Public Health Association.

The Reference Committee recomended and the House adopted Resolution No. 19.

Part IV

The Clackamas County Medical Society also introduced Resolution No. 20 relating to the establishment of a single state health care agency and read:

THEREFORE, BE IT RESOLVED, that the Oregon Medical Association institute and implement to the best of its ability improved health care in the State of Oregon by encouraging and cooperating with the development of a single state agency to coordinate and implement the distribution of health funds from whatever source available and encourage the administrative and legislative branches in the State of Oregon to implement such a program.

The Reference Committee recommended and the House adopted Resolution No. 20.

Part V

The Report of the Special Committee on Public Law 89-749, an Act titled "Comprehensive Health Planning and Public Health Service Amendments of 1966", outlined the specific provisions of the Act and the current status of its implementation in Oregon. The report of the Special Committee was primarily informational.

The Reference Committee recommended that the report be accepted. Adopted.

Part VI

The report of the Committee on Conservation of Vision contained the following recommendations:

1. That the Association reaffirm its opposition to S. 260 (Medical Restraint of Trade Act) introduced by Senator Phillip Hart and that individual members of the Association be encouraged to direct letters to Oregon's two Senators as well as to members of the Senate Judiciary Committee and Sub-Committee on Monopoly.
2. That the Association reaffirm the statement of policy of the State Department of Education on the subject: "Health Appraisal in Schools" as distributed on November 21, 1963, in which it recommends that screening procedures in the schools not be conducted by practitioners specializing in any limited field of practice.
3. That the Association reaffirm the special statement on the method of vision screening as set forth on pages 18, 19 and 20 of the manual "Health Services for the School-Age Child in Oregon," 1958, prepared and adopted by the Joint Staff Committee, the policy forming body of the Oregon State Board of Health, the Oregon State Department of Education and the Oregon State System of Higher Education.

The Reference Committee recommended and the House adopted the report of the Committee on Conservation of Vision and the recommendations contained therein.

Part VII

The report of the Committee on Public Policy listed 107 bills and resolutions pending before the 1967 Oregon Legislative Assembly which have some relationship to medicine and the public health. Of this number 52 House and Senate bills were listed as having the approval of the Oregon Medical Association through the recommendation of the Committee as approved by the Board of Trustees. It listed 43 such bills as not requiring specific action by the Committee or the Association. The remaining 12 House and Senate bills were on the list to be strongly opposed. The report listed four House bills as being worthy of vigorous support by the Association. They were:

1. H.B. 1266—which combines the medical and osteopathic practice acts and provides for the issuance of "limited" licenses by the Board of Medical Examiners.
2. H.B. 1461—which amends the Oregon Basic Science Law to give the State Board of Medical Examiners the power to accept Part I of the examination of the National Board of Medical Examiners in lieu of the Oregon Basic Science examination.
3. H.B. 1757—which establishes clinical laboratory standards and require the licensure of such laboratories and the certification of laboratory personnel by the State Board of Health.
4. H.B. 1769—which would amend Oregon's Welfare laws to provide for the implementation of Title XIX of Public Law 89-97 in Oregon. In addition to the report of the Committee on Public Policy; Reference Committee "B" also was assigned No. 5 introduced by the Yamhill County Medical Society expressing opposition to the laboratory licensing bill and which read:

BE IT RESOLVED that the Yamhill County Medical Society be joined by the Oregon Medical Association House of Delegates in opposing the recent action of the Trustees in their suggestion to the licensed medical laboratories.

And Resolution No. 21 introduced by the Clackamas County Medical Society and urging that the Association support Senate Bill 423, a Senate version of a Title XIX bill, and Resolution No. 22 introduced by the Committee on Pharmacy and Drugs with the concurrence of the Oregon Pharmaceutical Association recommending support for House Bill 1769 which reads:

WHEREAS, the engrossed House Bill 1769, a legislative proposal to implement Title XIX of Public Law 89-97 in Oregon, now contains significant provisions to create a constructive program of medical assistance for the needy of Oregon; and,

WHEREAS, included among the provisions is the appointment of a 15-member Advisory Committee by the Governor to advise the Welfare Commission with regard to the eligibility and scope of services to be established;

THEREFORE, BE IT RESOLVED, that the Oregon Medical Association work toward the definition of the composition of this

Advisory Committee in order that providers of health care and services will be well represented; and,

BE IT FURTHER RESOLVED, that the Oregon Medical Association strongly support the passage and implementation of House Bill 1769.

Reference Committee "B" submitted the following recommendations with respect to the Report of the Committee on Public Policy and the resolutions related to State Legislative proposals:

1. That the report of the Committee on Public Policy be adopted with the following additional recommendations:
    a. That stronger emphasis be inserted in H.B. 1769 to "authorize and encourage" the State Public Welfare Commission to contract with insurance carriers and with fiscal intermediaries for medical care and services under Title XIX programs.
    b. That the Committee on Public Policy seek to resolve the differences relating to H.B. 1757, the Laboratory Licensing bill, so that the best interests of the patient and the physician will be met with satisfaction.
2. That Resolution No. 5 opposing the licensing of clinical laboratories not be approved.
3. That Resolution No. 21 recommending that the Association support Senate bill 423 be adopted.
4. That Resolution No. 22 recommending that the Association support H.B. 1769 including the appointment of an advisory committee by the Governor as provided in the bill be approved.
5. That special commendations be given to the Committee on Public Policy for its untiring effort and dedication during this Legislative Session.

The recommendations of Reference Committee "B" relative to the report o fthe Committee on Public Policy and the resolutions relating to State legislative measures were adopted by the House.

Part VIII

Reference Committee "B" called special attention to the fact that some standing and special committees were following the practice of presenting their formal reports and then supplementing them with independent resolutions containing specific recommendations. The Reference Committee pointed out that such resolutions can easily be made a part of the Committee's recommendations and contained in their report and substantially reduce the work of reference committees. The Reference Committee, therefore, recommended and the House adopted, that all standing and special committees be requested to discontinue the use of the "resolution form" for submitting recommendations and rather include recommendations in their annual or mid-year reports.

report of reference committee "C"

Reference Committee "C" had assigned to it all matters relating to the Bylaws of the Association, hospital problems, renal dialysis and a number of miscellaneous items. These included three standing and special committee reports and 8 resolutions.

The members of the Committee were Roy E. Cochran, Oregon City, Chairman; B. Brandt Bartels, Medford; William A Fischer, Portland; Beatrice K. Rose, Portland; and George Zupan, Klamath Falls. The reports of the Reference Committee and the House of Delegates' actions are as follows:

Part I

The report of the Committee on Revision of Articles of Incorporation and Bylaws contained:

1. A recommendation that Chapter X of the Bylaws be amended by removing the Committee on Medical Education from the Committees included in the Education Commission, by dissolving the Committee and transferring its duties to a new Council on Medical Education. This recommendation was in accordance with the action of the House of Delegates at its 1966 annual meeting. The recommendation also created a new Section 10 entitled "Council on Medical Education" in Chapter X in which is delineated the functions of the newly created council and its organizational structure. (The text of the new section is not repeated here because of its length and delegates are requested to refer to the Report of the Committee appearing on Page 25 of the Delegate's Handbook for the 1967 mid-year meeting.)
2. The Committee requested instruction from the House of Delegates with respect to the beginning of Trustee terms. Resolution No. 3 introduced at the 1966 annual meeting and referred to the Committee recommended that the trustees' terms begin immediately upon their election by the component society or societies forming a trustee district. Trustees' terms begin on the last day of the Association's annual meeting whereas some component societies comprising a trustee district elect their trustees to the OMA ten months in advance of the annual meeting. The Committee on Revision of Articles of Incorporation and Bylaws called attention to the confusion which would exist if the terms of trustees were not uniform.

The Committee recommended: That the amendment creating a Council on Medical Education be adopted and that no change be made in the time for seating trustees but that any component society adversely affected by the present position be encouraged to change the date of electing its trustees. The recommendations of the Reference Committee were adopted.

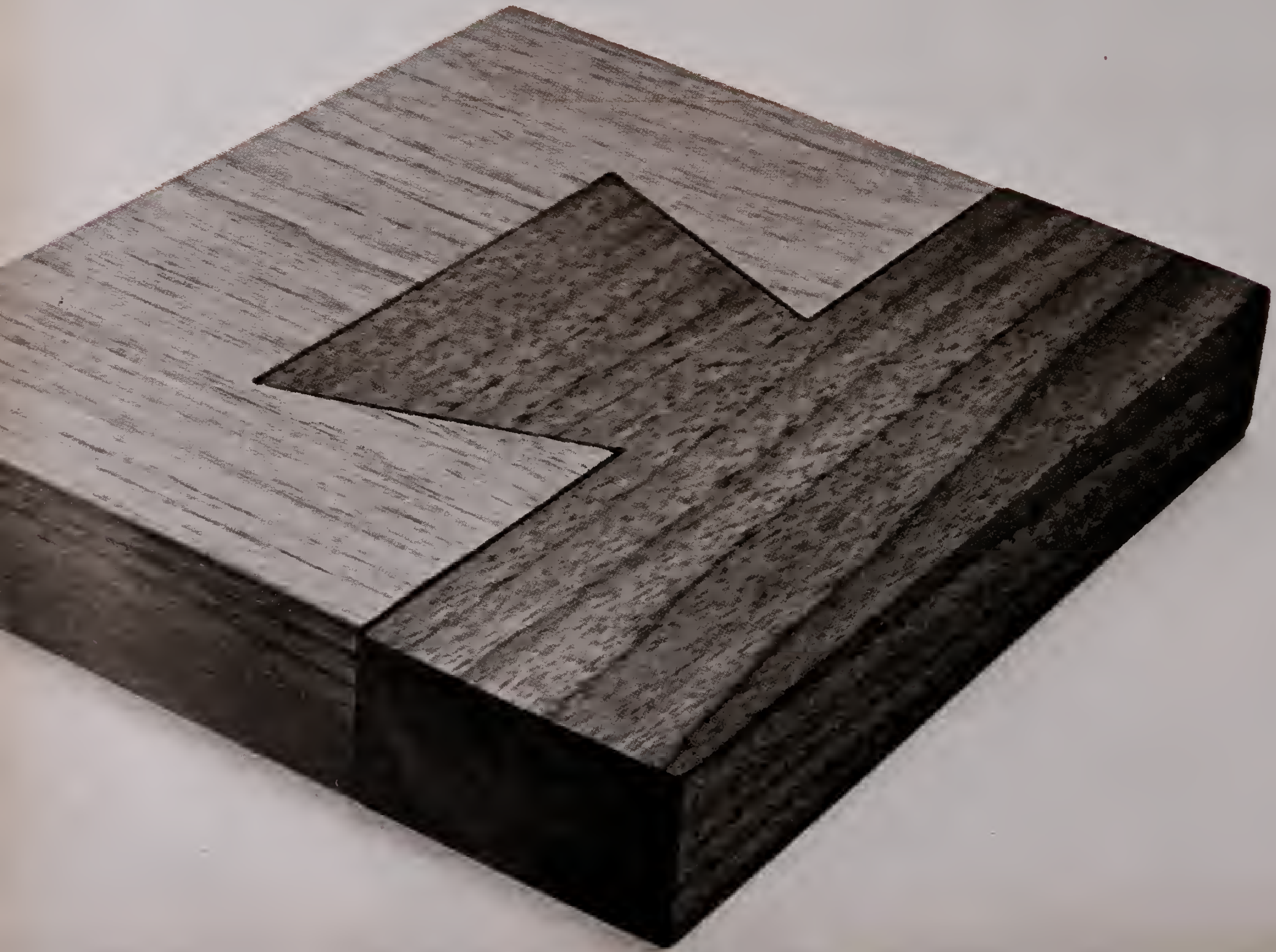
continued on page 665

even better together
in mild hypertension

Serpasil®-Esidrix®

(reserpine and hydrochlorothiazide CIBA)

Combination Tablets



Serpasil-Esidrix combines reserpine (the original, and most widely used, rauwolfia alkaloid developed by CIBA) with hydrochlorothiazide (the most widely used oral diuretic, also a product of CIBA research).

even better blood pressure reduction—because 2 antihypertensive agents of choice often work better together

One drug potentiates the antihypertensive action of the other. Blood pressure is generally controlled with relatively low dosages of each component, often resulting in minimized side effects.

Although each component alone may provide adequate therapy in many cases of mild hypertension, the combination offers advantages which cannot be achieved with single-drug therapy.

even more patient benefits—because complementary actions of 2 antihypertensive agents extend the range of advantages

Reserpine, in addition to lowering blood pressure, provides central calming action to help relieve anxiety and tension; provides bradycrotic action to slow the rapid heart.

Hydrochlorothiazide, in addition to lowering blood pressure, relieves edema; permits relaxation of salt restriction.

The combination provides medication in one tablet instead of two; one prescription instead of two—encourages patient adherence to the regimen, offers economy.

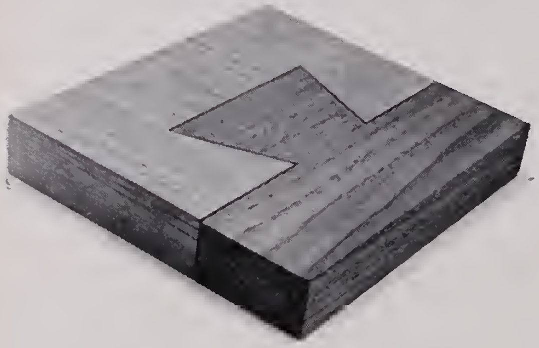
for your next patient with mild hypertension

Rx Serpasil-Esidrix

Combination Tablets

Please see following page for prescribing information.

Serpasil®-Esidrix®
(reserpine and hydrochlorothiazide CIBA) Combination Tablets



INDICATIONS: Mild to moderate hypertension, especially when complicated by anxiety, tachycardia, or edema.

SIDE EFFECTS AND PRECAUTIONARY MEASURES

Serpasil® (reserpine CIBA)
Occasional side effects: lassitude, drowsiness, nasal congestion, looseness of stools, increased frequency of defecation. Rare side effects: anorexia, headache, bizarre dreams, nausea, dizziness, skin rash.

Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg daily. When the drug is discontinued, depression usually disappears, but hospitalization and shock therapy are sometimes required.

Caution: Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to prevent or reverse hypotension and/or bradycardia.

Because reserpine may increase gastric secretion of hydrochloric acid, use cautiously in patients with peptic ulcer.

Use cautiously with digitalis, quinidine, or guanethidine. Not recommended for aortic insufficiency.

Esidrix® (hydrochlorothiazide CIBA)
Contraindictions: Oliguria, renal shutdown, progressive hepatic disease, and allergy to thiazides.

Warnings: Stenosis, hemorrhage, and ulceration of the small bowel have occurred with coated potassium tablets. Discontinue such medication when used with Esidrix if gastrointestinal disturbances arise.

Pay special attention to electrolyte balance of patients with severe renal or hepatic insufficiency. In patients with cirrhosis and ascites, watch for symptoms of impending hepatic coma. Thiazides may decrease glucose tolerance; use cautiously in diabetics. Hyperuricemia may occur but is readily reversed by a uricosuric agent. Lowering of blood pressure may sometimes result in nitrogen retention, particularly in patients with impaired renal function. Dosage titration is necessary in such patients.

Precautions: Watch for signs of fluid or electrolyte imbalance. Further electrolyte depletion may cause hypochloremic alkalosis and hypokalemia. Since the latter may precipitate digitalis intoxication, watch carefully patients who are taking digitalis or its glycosides or those with cardiac arrhythmias. In severe hypokalemia, large oral or intravenous doses of potassium may be required.

A few infants born of mothers who received thiazides during pregnancy have shown bone marrow depression with thrombocytopenia. Hydrochlorothiazide decreases responsiveness to exogenous norepinephrine and increases responsiveness to tubocurarine. Hypotensive episodes under anesthesia have been observed in some patients receiving thiazides.

Side Effects: In addition to those above, nausea, anorexia, headache, restlessness, constipation, dizziness, paresthesias, fatigue, increased sweating, cramps in arms and legs, diarrhea, abdominal pain. Rare reactions: purpura with or without thrombocytopenia, skin rash, photosensitivity, urticaria. Sometimes associated with hydrochlorothiazide: leukopenia, agranulocytosis, aplastic anemia, pancreatitis, jaundice, necrotizing vasculitis.

DOSAGE
Average dosage is 2 *Tablets #2* daily. For patients requiring less hydrochlorothiazide, substitute *Tablets #1*. For maintenance, reduce dosage to lowest effective level. When necessary, more potent antihypertensive agents may be added gradually in reduced dosages.

SUPPLIED
Tablets #2 (light orange), each containing 0.1 mg reserpine and 50 mg hydrochlorothiazide; bottles of 100 and 1000. *Tablets #1* (light orange), each containing 0.1 mg reserpine and 25 mg hydrochlorothiazide; bottles of 100 and 1000.

Consult complete literature before prescribing.

CIBA Pharmaceutical Company, Summit, N. J. C I B A

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Part II

Resolution No. 1 introduced by the Multnomah County Medical Society which recommended the creation of the position of Vice Speaker of the House of Delegates read:

> THEREFORE, BE IT RESOLVED, that the office of Vice Speaker of the House of Delegates be created, and,
>
> BE IT FURTHER RESOLVED, that this officer shall assist, relieve, and substitute for the Speaker as required; and,
>
> BE IT STILL FURTHER RESOLVED, that the requirements for this office and the manner of election to this office shall be the same as for the office of Speaker.

The Reference Committee recommended that Resolution No. 1 not be adopted but that Bylaws be amended to provide that the Vice President become the Vice Speaker of the House of Delegates.

Upon motion duly made, seconded and carried, the recommendation of Reference Committee "C" was not adopted. A motion was made and duly seconded, providing that Resolution No. 1 be adopted. Upon motion duly made, seconded and carried, it was voted that Resolution No. 1 be referred to the Board of Trustees.

Part III

Resolution No. 17 introduced by the Section on Internal Medicine proposed that voting privilege be given to the representatives of scientific sections serving in the House of Delegates and read:

> THEREFORE BE IT RESOLVED, that the official representative of each of the scientific sections of the Oregon Medical Association be granted full voting privileges in the Oregon Medical Association's House of Delegates; and,
>
> BE IT FURTHER RESOLVED, that Section 8 of Chapter XIII of the Bylaws of the Oregon Medical Association which read: "The officers of a scientific section shall be chairman, vice-chairman, secretary-treasurer and a non-voting representative to the House of Delegates" be revised by removing the word "non-voting" and substituting in its place the word "voting."

The Reference Committee recommended that Resolution No. 17 not be adopted.

Action of the House of Delegates—Reversed.

The House of Delegates voted not to adopt the recommendation of the Reference Committee with respect to Resolution No. 17.

Then, upon motion duly made, seconded and carried, the House voted that Resolution No. 17 be adopted.

Part IV

Resolution No. 6 introduced by Joseph L. Miller, Jr., Delegate from Multnomah County, (resolved only) read:

> THEREFORE BE IT RESOLVED,
>
> 1. that the Special Committee on Policy Forming Practices be dissolved; and
> 2. that a new committee of 11 members, to be called the Study Committee on Grassroots Representation, be appointed by the Speaker of the House of Delegates, to serve until the 1968 annual session; and
> 3. that this new committee be constituted as follows:
>   a. all 11 members to be members of OMA and all to be interested in promoting the work of the committee,
>   b. not more than 7 of the 11 members to have held office in the OMA, a component county society or OMPAC; and,
>   c. four of the 11 appointments to be based upon recommendations of the Dean of the University of Oregon Medical School; and of the Presidents of the Oregon Academy of General Practice, the Oregon Society of Internal Medicine, and the Portland Surgical Society; and,
>
> BE IT FURTHER RESOLVED, that the duty of this new committee shall be to study:
>
> 1. Any ways in which our existing representative structure can be stimulated to function better,
> 2. means of increasing grassroots participation at meetings, and in our presently authorized nominative and elective processes,
> 3. any ways of increasing, among all OMA members, the constructive exchange of ideas concerning controversial issues, prior to decision-making by our duly elected leaders and representatives,
> 4. means of determining & financing OMA efforts to influence public legislation; and,
>
> BE IT FURTHER RESOLVED, that this new committee is hereby encouraged as an initial step in its studies, to send to all members of the OMA a brief letter inviting them to send to the committee any ideas or suggestions they may have concerning the subjects under study; and,
>
> BE IT FURTHER RESOLVED, that this new committee shall report the conclusions and recommendations of the majority of its members, (with reports of minorities in addition if appropriate) to the House of Delegates at or before the 1968 annual session.

The Reference Committee recommended that Resolution No. 6 be amended:

> 1. By providing that the new committee shall be appointed by the president of the Association rather than the Speaker of the House of delegates; and,
> 2. By deleting Section 3(c) of the first "Resolved". And that the Resolution be adopted as amended.

The House of Delegates voted to adopt Resolution No. 6 as amended by Reference Committee "C".

Part V—OMA Supports AMA Disability Program

Three resolutions were introduced relating to the current controversy over the lifetime disability insurance program sponsored by the AMA. The resolutions were:

1. Resolution No. 2 introduced by the Umatilla-Morrow County Medical Society reading:
   NOW THEREFORE BE IT RESOLVED, that the Umatilla-Morrow County Medical Society objects to the proposed changes of the Continental Casualty Company, and urges the Oregon Medical Association and the American Medical Association through its delegates to the AMA to prevent these listed detrimental changes.
2. Resolution No. 3 introduced by the Lane County Medical Society resolving:
   BE IT RESOLVED that the Continental Casualty Company be held to the terms of its specified contract.
3. Resolution No. 13 introduced by the Multnomah County Medical Society read:
   THEREFORE BE IT RESOLVED, that the AMA discontinue its participation in any further group disability insurance programs on a national basis, and,
   BE IT FURTHER RESOLVED, that the AMA encourage local and regional medical organizations to establish, promote and sponsor disability insurance programs for their respective members; and,
   BE IT STILL FURTHER RESOLVED, that the Oregon delegation to the AMA be instructed to introduce the above resolution at the June 1967 annual convention of the AMA House of Delegates in Atlantic City, N.J.

Reference Committee "C" after hearing much discussion regarding the lifetime disability insurance program of the AMA *submitted* the following recommendation:

That Resolutions No. 2, No. 3 and No. 13 not be adopted but that the following substitute resolution be adopted:

1. That the Association's delegates to the AMA be instructed to support an AMA disability insurance program which is in the best interests of the membership.
2. That the Association's Committee on Professional Welfare be instructed to study possible improvements in the Association's existing disability insurance programs.

The House of Delegates adopted the recommendations of Reference Committee "C".

Part VI—OMA Creates Statewide Kidney Program

The report of the Special Committee on Renal Dialysis included the following recommendations:

1. That a statewide program for the treatment of chronic renal disease be established utilizing and coordinating existing and potential facilities. This program should incorporate a philosophy that encompasses hospital programs, including transplants and dialysis and training for home dialysis, and other methods as they appear on the horizon.
2. That a statewide non-profit corporation be established, with a full time executive director, the duties of which are to promote and receive funds from the many public and private sources that may be available and which will determine the final selection of patients according to the funds available. This non-profit corporation should also include a medical advisory board to medically screen and supervise the quality and appropriateness of care. Such an advisory board should be available to all physicians of the state for consultation as to appropriate modes of treatment available.

The Reference Committee recommended that the report of the Special Committee on Renal Dialysis be amended by adding the following recommendation and adopted: that there be medical representation on the board of directors of the statewide non-profit corporation.

The House of Delegates voted to adopt the report and recommendations of the Special Committee on Renal Dialysis as amended by the Reference Committee.

George Zupan, Klamath Falls; B. Brandt Bartels, Medford; Roy E. Cochran, Oregon City, Chairman of the Committee; Beatrice K. Rose, Portland; William A. Fisher, Portland, and Mrs. Genevieve Brown, OMA staff secretary, comprised Reference Committee C who considered all matters relating to the Bylaws of the Association, hospital problems, renal dialysis and a number of miscellaneous items.

Part VII—Clarification of Provisions Relating to Physician-Hospital Outpatient Department

The report of the Committee on Hospitals and Related Institutions contained the following recommendations:

1. That the Oregon Medical Association approve the establishment of arangements between a hospital and a physician to provide medical service in the hospital's outpatient department under the following conditions:

   That the physician or physicians selected to provide the service and the arrangements with the hospital have been duly approved by the medical staff;

That the physician or physicians bill outpatients directly for their services or if the hospital acts as the billing agent for the physician or physicians, the administrative charge shall be reasonable.

That the hospital may guarantee a minimum income to the outpatient physician or physicians but may not profit financially from his professional services.

That the hospital staff establish specific rules and limitations with respect to the scope of care and treatment to be provided by physicians having arrangements to cover the outpatient department.

2. That component medical societies be encouraged to assume leadership in the establishment of area-wide hospitals planning councils and that the Oregon Medical Association give consideration to supporting legislation which would give such councils legal authority within their area of jurisdiction.
3. That the president of a hospital medical staff be named as an ex-officio non-voting member of the hospital's governing body.
4. That component medical societies be urged to discuss the utilization review problems of extended care facilities under Public Law 89-97 within their areas of jurisdiction and consider offering their assistance to such facilities.

Reference Committee "C" recommended that recommendation No. 3 of the report of the Committee on Hospitals and Related Institutions be amended to read: That physician(s) elected by the hospital medical staff be members of the hospital governing body with full rights and privileges.

The House of Delegates voted to adopt the recommendations of Reference Committee "C" with respect to the report of the Committee on Hospitals and Related Institutions.

Part VIII—Nursing Education Supported

Resolution No. 15 introduced by the Multnomah County Medical Society and relating to Association support for nursing education programs reads:

> THEREFORE, BE IT RESOLVED, that the Oregon Medical Association join with the Oregon Association of Hospitals in urging all institutions educating nurses to continue to prepare nurses and continue to study, to evaluate and to revise curriculums to meet the changing health needs of our State; and,
>
> BE IT FURTHER RESOLVED, that the Oregon Medical Association encourage expansion of existing hospital-based training programs and possible new nursing programs, and that the OMA pledge to seek increased financial support for these essential segments of Oregon's health care system.

Resolution No. 15 was adopted as recommended.

Part IX

Resolution No. 7 introduced by the Executive Committee of the Board of Trustees and which related to the use of the "Experience refund provision" contributions under the Association's disability insurance program reads as follows:

> THEREFORE BE IT RESOLVED, that the Board of Trustees be given discretionary authority, with respect to the use of any "experience refund" contributions which may become available to the Association under the provisions of its disability insurance program and that any such funds be used for capital outlay only.

After considerable discussion, Resolution No. 7 was adopted as recommended.

report of committee on resolutions

It is customary at each session of the House of Delegates to declare the Association's commendations to its members, consultants, staff and others who have made substantial contributions and given exceptional service to the Association. Accordingly J. Richard Raines, Chairman of the Committee on Resolutions, recommended that the House of Delegates extend their appreciation and commendations as follows:

1. To John E. Tysell, President, for his vigorous leadership and adherence to basic principles of the profession.
2. To Max H. Parrott, for his strong representation of this Association as an AMA Trustee.
3. To Blair J. Henningsgaard, for his work as Senior Delegate to the AMA and as President of the AMPAC.
4. To Ernest T. Livingstone, our second AMA Delegate and member of the AMA Council on Legislative Activities.
5. To James H. Seacat, and Daniel K. Billmeyer, our Alternate AMA Delegates.
6. To Clinton S. McGill, Speaker of this House of Delegates for the dispatch and efficiency with which he conducted this meeting.
7. To Committees of the Association that presented timely and significant reports at this mid-year meeting and to the component societies and individual members who prepared and submitted resolutions of eminent merit.
8. And especially to Donald F. Kelly, Chairman and other members of the Committee on Public Policy for their attention to the State Legislative affairs of the Association.
9. To Mr. John J. Coughlin for his invaluable service as legal counsel.
10. To Mr. John P. Misko, Legislative Representative for his dedicated and tireless work during this 1967 Legislative Session.
11. To the Woman's Auxiliary and especially its president, Mrs. William V. Zartman, for her charming and vigorous leadership.
12. To Mr. A. G. (Bud) Lindstrand, Medicare Claims Administration for the Aetna Life Insurance Company, for his excellent informative address at the opening session of this

continued on page 669

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continued from page 667

meeting and his general cooperation and understanding of medicine's problems in the administration of P. L. 89-97.

13. To the Association's Executive and clerical staff for the usual dedicated and tireless service during this meeting and throughout the year.
14. To Marge Davenport and Ann Sullivan for their reporting of the affairs of the Association to the news media.
15. To the management of the Village Green and its staff for the thoughtful and efficient service during this session.

The recommendations of the Committee on Resolutions was unanimously adopted.

New Nursing Director

Mrs. Lee Killam has been appointed director of nursing services at the University of Oregon Medical School Hospital. She succeeds Shirley Thompson, who has retired after 23 years as director.

Mrs. Killam, who will also serve as associate clinical professor of nursing, received her bachelor's degree from the University of Portland in 1944 and her master's degree from that institution in 1963. She also did graduate work at the University of Portland and Boston University during 1963-1965. Prior to beginning her present position at St. Vincents Hospital she was with the U. S. Navy Nurses Corps and Sacred Heart Hospital in Eugene.

DR. ADOLPH WEINZIRL, *chairman of the University of Oregon Medical School's Department of Public Health and Preventive Medicine, and a member of the faculty for the past 30 years, died June 10 at his home in Portland.*

Born in Albuquerque, New Mexico, in 1900, Dr. Weinzirl attended the University of Washington in Seattle and later transferred to the University of Oregon where he received his B.S. degree in 1922. Three years later he was awarded his M.D. degree from the University of Oregon Medical School. Following service as Deputy Commissioner of Seattle's Department of Health and Sanitation he went to Johns Hopkins University where he received his Master of Public Health in 1932.

He served as Epidemiologist and Director of the Bureau of Communicable Disease in Baltimore before becoming City Health Officer in Portland in 1937. He was named to the full-time faculty of the University of Oregon Medical School in 1941, and when the Department of Public Health and Preventive Medicine was established in 1949, he was named its first chairman. He held that position until two months ago when he requested to step down as chairman to devote full time to teaching.

He received the coveted Dr. Allan J. Hill, Jr. Award for Outstanding Teaching, given by members of the graduating class in 1961. And he received the Oregon Public Health Annual Award in 1959 for Outstanding Service to the State and Nation. In 1961 the Western Branch of the American Public Health Association elected him to honorary membership for his "many years of devoted and selfless contribution to the Association." He also received honorary memberships in both the Oregon and the National Associations of Sanitarians and in 1965 was awarded a lifetime membership in the University of Oregon Medical School Alumni Association.

Dr. Weinzirl was a Fellow of the American Public Health Association and a past president of the Oregon Health Officer's Association and the Oregon Public Health Association. In 1962 he was delegate to the world forum on Syphilis and other Treponematoses and had served as chairman of the City of Portland's Air Quality Control Advisory Committee since 1964.

He is author of the textbook General Hygiene and Preventive Medicine *and numerous scientific papers.*

The Dr. Adolph Weinzirl Memorial Scholarship Fund has been established at the University of Oregon Medical School at the request of Dr. Weinzirl's family.

WASHINGTON

Washington State Medical Association—444 N.E. RAVENNA BLVD., Seattle, Washington 98115

PRESIDENT *Lucius D. Hill III, M.D., Seattle*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual Meeting, Sept. 10-13, Seattle

WSMA ANNUAL MEETING

September 10-13, 1967—Olympic Hotel, Seattle

Convention Highlights

Sunday, September 10:
House of Delegates; Committee Meetings; W. P. S. Stockvoters Meeting; Scientific and Technical Exhibits; Family Banquet and Reception Honoring Fifty-year Practitioners.

Monday, September 11:
Specialty and General Scientific Programs; Scientific and Technical Exhibits; Golf Tournament; Physician-Technical Exhibitor Reception; Sportsmen's Stag Banquet.

Tuesday, September 12:
General Scientific Session featuring Nobel Prize Winner; Scientific and Technical Exhibits; Governor Evans' Address; Reference Committees; Specialty Session Luncheons; New Presidents' Reception; Annual Dinner-Dance.

Wednesday, September 13:
President's Luncheon; House of Delegates; Specialty and General Scientific Sessions including tour of hospitals' patient monitoring facilities: Scientific and Technical Exhibits.

"End Measles Campaign" Kick-Off

A statewide "End Measles Campaign" that will culminate with a mass immunization drive in October 1967 was recently announced by Governor Daniel J. Evans. It had strong support from the Washington Association for Retarded Children, State Health Department and Washington State Medical Association.

Lucius Hill congratulated Governor Evans and the Washington State Legislature for providing leadership in the fight against red measles and urged the Governors and the Legislators, as parents, to see that their children were among the first to receive measles vaccine. Various lay and medical groups will conduct private campaigns to immunize as many children as possible on a fee for service basis prior to the "End Measles Days" in October.

The State will purchase and provide the Schwartz vaccine for use at the mass clinics in October. The State Health Department, and to a minor extent, the WSMA will assist county medical societies, county health departments and community groups to plan for the "End Measle Days." Each county will be responsible for its particular mass immunization clean-up drive. Physicians, nurses, allied health personnel and volunteers will donate their time for the clean-up clinics. Each clinic will be under the plans and procedures established jointly by county medical societies and county health departments.

Shown with the Governor announcing the "End Measles Campaign", are Frank J. Skerbeck, Port Angeles, Vice President, Washington Association for Retarded Children; Bernard Bucove, Olympia, State Director of Health, and Lucius, D. Hill, Seattle, WSMA President.

Quackery a Popular Topic

Robert E. Waud, Bellingham, a member of the WSMA Committee on Quackery and Harmful Acts, has delivered 25 to 30 talks in the Bellingham area on the topic of medical quackery during the past year. Dr. Waud makes his own slides and combines them with those of the AMA for an hour long presentation on the history of medical quackery. He also explains how the modern day health charlatan bilks millions of dollars each year from the unsuspecting public for a wide variety of health cures, foods and devices.

Dr. Waud tells the story that he was once describing "Kick-A-Poo Patent Medicine" and how thousands of gallons had been sold to the public, when a little lady sitting in the front row exclaimed, "My goodness, I've drank gallons of the stuff!" Dr. Waud, who has presented his talk to his own county medical society, to RN and LPN groups, has turned out to be a circuit favorite with the Kiwanis, Lions and other civic groups in his area.

Dr. Waud calls on the Department of Investigation of the American Medical Association, the Food & Drug Administration, U. S. Post Office Department, Better Business Bureaus, Consumer Protection Division of the State Attorney General's Office, and the WSMA for current pamphlets and films on health quackery.

He has been invited to appear and discuss medical quackery on a Bellingham television station, and looks forward to speaking before several state level allied health groups on the topic of "chiropractic." Dr. Waud has indicated a willingness to appear before other county medical societies.

Dr. Waud addressed the Twentieth Century Club in Bellingham.

Technical Advisory Committees

In 1966, the WSMA invited major medical specialty and subspecialty groups to select representatives to serve as a resource to the WSMA Medicare Advisory Committee, that is working with the Department of Public Health on the implementation of Title XVIII and the Department of Public Assistance on Title XIX. Sixteen Technical Advisory Committees have been appointed.

The Technical Advisory Committees are now proving to be a valuable resource to state agencies outside the area of Medicare. The Division of Health Facilities of the State Department of Health called on the Technical Advisory Committee representing obstetrics, surgery and anesthesiology on May 24 to secure physician reaction to proposed changes in hospital licensing regulations concerning the need for windows in hospital labor rooms, use of obstetrical delivery rooms for surgery, and use of surgeries for obstetrical deliveries, and the standards for conductive floors in anesthetizing areas. Recommendations of the Technical Committees are "advisory" only to the Department as other agencies and organizations must necessarily be consulted before a final decision is reached by the Department.

Students Work to Combat Smoking

Students at Bremerton's West High School have developed a Smoking and Health Committee to take the message to pre-high school groups on the danger and cost of cigarette smoking. Teams have been formed, that include two students and one local physician, to call on students in grades 4 through 8 inviting them to take the pledge "no cigarettes for me."

The health aspects are given by the physician, and then to dramatize the economic side, a girl walks into the room in a lovely evening gown and a boy pushes in a new motor bike. These are items that students could buy for the price of one package of

continued on page 675

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Precautions: Use with caution in moderate hypertension and cardiac decompensation. Cases involving abuse of or dependence on phenmetrazine hydrochloride have resulted in a psychotic illness manifested by restlessness, mood or behavior changes, hallucinations, or delusions. Do not exceed recommended dosage.
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PRESIDENT'S page

Key Role for Physicians In Automobile Safety

LUCIUS D. HILL, III, M.D.

With more people being killed on the highways than in Vietnam and with automobile accidents causing more deaths than any disease except cardiovascular disorders and cancer, it is imperative that the medical profession play a key role in combating the high mortality on the highways. The general public has expressed its alarm and desire for action through the Congress and the state legislature. The Federal Highways Safety Act, enacted in the National Congress, reflects the nation's concern over the tragic death toll.

In our own state legislature, six bills dealing with auto safety legislation were passed during the 40th session. Some additional 32 bills were introduced, but failed to pass. The Washington State Medical Association vigorously supported not only the bills that passed the legislature, but several of the bills that failed to pass. Among the key bills that passed were HB 269, which established a Washington Traffic Commission and HB 227, requiring minors under 18 years of age applying for a drivers license to show satisfactory proof of passing recognized driver education courses.

The Washington State Medical Association has taken an active role in promoting vehicle safety. The Vehicle Safety Committee has been especially active, under the leadership of Herb Hartley, and has been working with the Department of Motor Vehicles and the State Patrol regarding medical aspects of qualifying for drivers licenses. The House of Delegates, in 1966, directed the committee to consider all aspects of vehicle safety. This includes a study of transport of the injured to facilities equipped and staffed for proper medical care. The WSMA has offered the support of the Vehicle Safety Committee in developing and coordinating traffic safety programs throughout the state, in cooperation with the Washington Traffic Safety Commission. A bulletin outlining these steps, as well as the legislation that has now become law, has been sent to all county medical societies, urging the societies to establish vehicle safety committees to work with WSMA and the Washington Traffic Commission.

The work that needs to be done by these various groups is most important. The medical aspects of obtaining licenses needs close scrutiny and upgrading. The handling of the injured at the scene of the accident and the transport of the injured in ambulances to emergency rooms also needs re-evaluation. The Vehicle Safety Committee will work closely with those providing ambulance service to insure that trained personnel are available for transport of the seriously injured.

In addition to these important functions, the Vehicle Safety Committee has made recommendations regarding safety devices on automobiles, drivers' safety regulations, driver training, improvements in roads and road markings, and, in addition, has urged publicizing the problem and action on the part of everyone concerned with automobiles and automobile safety.

The WSMA has recently sent Frank Asbury to a Congress on Emergency Medical Services—a committee headed by Dr. Asbury has been charged with the responsibility of studying emergency room facilities in the state of Washington.

The WSMA and the Vehicle Safety Committee are anxious to see the establishment of safety committees in each county. These local committees, working with the local police in communities, can render a great service in implementing the recommendations of the Vehicle Safety Committee and the Traffic Safety Commission on a local level.

The physician who is faced with care of the critically injured plays a key role in the entire spectrum of automobile safety. By a concerted effort of all concerned, we may reduce the shameful mortality on the highways and make the automobile a safe means of transportation. ■

Lucius Hill M.D.

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cigarettes a day for one year. Pledge cards certifying that the youngster is an honorary member of the West High School Committee on Smoking and Health and bookmarks stating "Every cigarette may shorten your life several minutes," are then distributed.

Two active members of the West High School committee are Pam and Berry Muller, daughter and son of Dr. and Mrs. Charles D. Muller, Bremerton. Dr. Muller is WSMA president-elect. Pam and Berry recently visited Washington, D. C., with their parents who were attending the National AMPAC Workshop. While there, they reported to Washington State Congressmen on the student smoking and health program.

Senator Warren G. Magnuson arranged a tour for Pam and Berry of the Federal Trade Commission Cigarette Testing Laboratory where they saw a smoking machine at work. In the machine cigarettes are smoked at the rate of one - two second puffs every minute in a room with constant temperatures of 75 degrees and 60 per cent relative humidity. Before the cigarettes are put into the smoker, the filter holders and filters into which the cigarettes are inserted are weighed, and after the smoker process is completed, the filters are weighed again. After a series of several tests, the tar and nicotine content of each cigarette is determined.

WSMA members should not be surprised if they find a West High School bookmark listing some facts about smoking in their program at the 1967 Annual WSMA Meeting.

Pam and Berry Muller watch Mr. Harold S. Pillsbury, a chemist for the FTC, demonstrate a smoking machine.

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Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

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Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have also been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Adverse Reactions: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have developed in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly, usually within forty-eight hours, if the drug is readministered to sensitive patients. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®, Ilosone Liquid 125, Ilosone, 125, for Oral Suspension, Ilosone Drops, Ilosone Chewable Tablets.

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Ilosone Liquid 125, Oral Suspension, U.S.P., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60-cc. and pint-size packages.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50. [032767]

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

700970

BOOKS

RECEIVED: The following books have been received Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

You are as young as your spine. By Editha Hearn, Cyriax Physiotherapist. M.C.S.P., M.E. Let., London. 120 pp. Illustrated. Price $4.50. Doubleday & Co., Inc, New York 1967.

Laboratory tests in common use. By Solomon Garb, M.D., F.A.C.P., Professor of Pharmacology, Assoc. Professor of Community Health & Medical Practice, University of Missouri School of Medicine. 192 pp. Price $2.85. Springer Publishing Co., Inc., New York. 1966.

Drugs in current use 1967. By Walter Modell, M.D., F.A.C.P., Assoc. Prof. Clinical Pharmacology, Cornell University Medical College. 152 pp. Price $2.75. Springer Publishing Co., Inc., New York. 12/66.

Unusual clinical features of cirrhosis and primary liver cell carcinoma. By Luis Leon-Sotomayor, M.D., F.A.C.C.P.; Clinical instructor in medicine, the University of Texas Medical Branch, Galveston, Texas; and Victor A. Moore, M.D., F.A.C.P., Assoc. Professor of Medicine; Chief, Gastroenterology Section, Medical College of Georgia, Augusta, Georgia. 172 pp. Illustrated. Price $9.50. Charles C Thomas, Springfield, Illinois. 1966.

Bone tumors. By David C. Dahlin, M.D. Consultant, Section of Surgical Pathology, Mayo Clinic; Professor of Pathology, Mayo Graduate School of Med. University of Minnesota, Rochester, Minnesota. 285 pp. Price $16 (Ills.) Charles C Thomas, Springfield, Illinois. 1966.

The cervical syndrome. By Ruth Jackson, B.A., M.D., F.A.C.S., Asst. Clinical professor, Orthodpaedic Surgery, Southwestern Med. School of U. of Texas, Dallas. 333 pp. Illustrated. Price $10.50. Charles C Thomas, Springfield, Illinois. 1966.

Practic of intramedullary nailing. By Gerhard Kuntscher, Professor of Surgery & Chief of Surgery, Harbour Hospital, Hamburg, Germany. 374 pp. Illustrated. Price $14. Charles C Thomas, Springfield, Illinois. 1966.

Pulmonary insufficiency and respiratory failure. By Giles F. Filley, M.D. Assoc. Professor of Medicine, Div. of Pulmonary Diseases, University of Colorado School of Medicine; Pulmonary Physiologist, the Webb-Waring Institute for Medical Research, Denver. 162 pp. Illustrated. Price $7 Lea & Febiger, Philadelphia, Penna. 1967.

Allergy and human emotions. By John P. McGovern, M.D. Clinical Professor of Allergy, University of Texas and James A. Knight, M.D., Professor of Psychiatry and Dean of Admissions and Student Affairs, Tulane University School of Medicine, New Orleans, La. 166 pp. Price $7.75. Charles C Thomas, Springfield, Illinois. 1967.

Foot disorders: medical and surgical management. By Nicholas J. Giannestras, M. D. Dept. of Orthopaedic Surgery, University of Cincinnati, College of Medicine, Cincinnati, Ohio; Chairman, Section of Fractures and Orthopaedics, Good Samaritan Hospital, Cincinnati, Ohio. 521 pp. Illustrated. Price $22. Lea & Febiger, Philadelphia, Penna. 1967.

From one surgeon's notebook. By Loyal Davis, M.D., M.S., Ph.D. Emeritus Professor of Surgery, Northwestern University Medical School, Chicago, Illinois. 145 pp. Price $5.75. Charles C Thomas, Springfield, Ill. 1967.

Planetology and space mission planning. (NY Academy of Sciences publication) R. D. Enzman, Conference Chairman & Consulting Editor, and many co-authors. 683 pp. (collection of papers) Pub. 12/16/1966.

continued on page 684

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BRISTOL

BRISTOL LABORATORIES
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continued from page 627

States. The manufacturers state that there is no consumer demand. The only practical method of assuring that children's clothing is relatively flame resistant is through federal legislation enabling minimum standards to be set for fabric flammability. The present Flammable Fabrics Act passed in 1953 in response to the torch sweater incidents, excludes explosive materials from the market, but is clearly inadequate as evidenced by the continuing toll of clothing fires involving textiles that pass the test. Any other method such as calling for voluntary efforts in the industry would be temporizing. Everyone must abide by the same standards to both lower the cost of flame-proofing, and prevent the responsible manufacturer from being undercut.

Some physicians have been prominent in the battle for prevention of clothing burns, primarily those who have the unhappy job of caring for victims. Calls for action have come from the Society of Plastic and Reconstructive Surgeons, the Trauma Committee of the American College of Surgeons, and the Committee on Accident Prevention of the American Academy of Pediatrics. The action was somewhat slow in coming until the senior senator from Washington, Warren G. Magnuson, entered the fray. Senator Magnuson, Chairman of the Senate Commerce Committee, along with Senator Harrison Williams of New Jersey introduced the Flammable Fabrics Act Amendments of 1967 (S 1003), allowing minimum standards to be established.

Flame resistant clothing may cost the industry and the consumer, particularly at first, but so did Sanforized and Durapress cloth when they were first developed. The costs of burns are also tremendous, particularly in view of the fact that they occur in previously well individuals and are all preventable. It costs at least $100 a day to care for an acute burn patient, and long hospital stays are the rule rather than the exception. Gerald R. Bassett, Director of the Washington State Crippled Children's Services calculated that though less than 1 per cent of the CCS caseload consists of burn victims, these same individuals account for over 5 per cent of the total program service expenditures. This does not include acute care, which the program does not cover.

In our country, priorities for the public's health dollar are often decided by the vociferance of backers of particular diseases. Accident victims have no national organization representing them, and no fund-raising drives.

Senator Magnuson can be justly proud of playing an instrumental role in founding the National Cancer Institute in 1938. The dividend for that accomplishment, however, will hopefully come from saving lives in the future. Far greater impact on the lives and health of our citizens today will accrue from his efforts in consumer safety legislation, such as cigarette smoking, auto safety and flammable fabrics.

Political medicine can have a profound effect on the public's health. Active and informed involvement of physicians is necessary if this type of medicine is to be practiced wisely. ■

ABRAHAM B. BERGMAN, M. D.

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More than 170.000 Americans have their lives protected by this bracelet. The nonprofit Medic Alert Foundation of Turlock, California, provides the signaling device for the one person in five who have a special or "hidden" medical problem. The American Medical Association estimates that forty million Americans should be wearing some sort of medical warning device. One side of the emblem has the words "Medic Alert" and the staff of Aesculapius to warn emergency personnel that a special medical problem exists. On the back is engraved the member's medical problem, such as "Diabetes," "Allergic to penicillin," et cetera. A 24-hour a day collect telephone number and an individual serial number also engraved on each emblem provides an additional link with life for the member. A one-time basic fee of $5.00 is charged.

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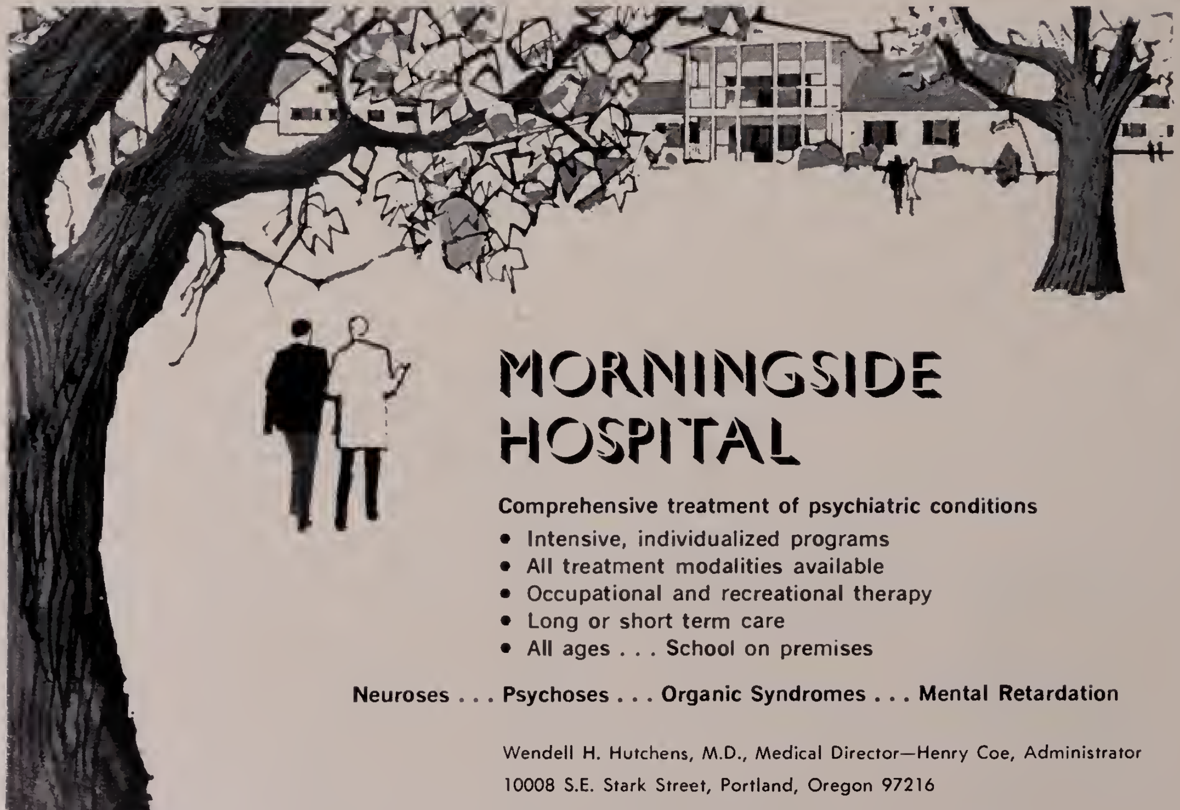

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Annual Meeting, June 26-29, 1968, Sun Valley

WICHE Advisory Committee

The Idaho Advisory Committee to the Mountain States WICHE Regional Medical Programs for Heart, Cancer, and Stroke met in Boise recently. Physician members attending included Robert K. Borron, Nampa; Lloyd S. Call, Pocatello; Willis L. Hubler, Caldwell; Robert E. Staley, Kellogg; Wallace H. Pierce, Lewiston; George W. Warner, Twin Falls; and Frank W. Crowe, A. B. Halliday, Raymond L. White, and A. Curtis Jones, Jr., all of Boise.

Others attending were George E. Brown, Jr., Twin Falls, and E. V. Simison, Pocatello, members of the association Medical Education Committee; President-Elect James R. Kircher, Burley, and O. D. Hoffman, Rexburg, and Joseph B. Marcusen, Nampa, Councilors; William R. Tregoning, Boise, Secretary-Treasurer. Martha D. Jones, Boise, Idaho WICHE Commissioner, also attended.

Robert S. McKean, Boise, Director of the Idaho Study of Mountain States Regional Programs, met with the officers and councilors of the Association to present a review of activities and proposed plans.

Forty-five Attended Workshop

A workshop on "Immediate Care of the Sick and Injured" was presented in the Boise College Auditorium in May, under the sponsorship of the Idaho Medical Association, the Committee on Trauma of the American College of Surgeons and the Idaho State Department of Health. Forty-five people representing professions likely to come into early contact with accidental injury victims attended.

Among the speakers at the workshop were A. Curtis Jones, Jr., Idaho Medical Association President; David K. Ricks, Robert F. Holdren, C. E. Clohessy, Edward J. Kiefer, A. H. Kuykendall, Walter W. Hair, H. Theodore Thoreson, Hugh V. Firor, Quentin L. Quickstad, Dean E. Call, Dale D. Cornell, Leonard E. Alkire, Loren D. Blickenstaff, Richard G. Gardner, Keith A. Taylor, Richard O. Vycital, Everett N. Jones, Jr., and James C. F. Chapman, all of Boise.

Cooperating in arrangements for the program were Dr. Vycital, who is Chairman of the Idaho Trauma Committee of the American College of Surgeons, and Harold W. Hatten, Boise, chairman of the Association's Disaster and Civilian Defense Committee.

State Board of Medicine Section

The Idaho State Board of Medicine, met in Boise July 10-12, to consider application for licensure by endorsement and by examination, and review disciplinary actions and routine business.

Two newly-appointed members seated on the Board are James S. Newton, Lewiston, and G. Curtis Waid, Idaho Falls. Other members of the Board are Charles A. Terhune, Burley; Charles E. Kerrick, Caldwell; Orland B. Scott, Kellogg, and Robert E. Lloyd, Boise.

OBITUARY

DR. OAKS H. HOOVER, *Caldwell, drowned April 29, 1967, in Lake Lowell. He was 46. Dr. Hoover was born in Boise. He was graduated from the University of Oregon Medical School in 1951, interned at St. Vincent Hospital in Portland, and began his medical practice in Caldwell in July, 1952. He served with an Army Ordinance group in the European Theater during World War II. Dr. Hoover was president of the Southwestern Idaho District Medical Society and had served as chief of staff of Caldwell Memorial Hospital.*

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Seventh international transplantation conference. (NY Academy of Sciences publication) John M. Converse, Jean Dausett and Felix T. Rapaport, Conference Co-chairmen. (collection of papers) 884 pp. Pub. 12/30/1966.

Gastric pepsin, mucus, and clinical secretory studies. (NY Academy of Sciences publication.) David C. H. Sun and Franklin Hollander, Conference Cochairmen. (collections of papers) 268 pp. Pub. 1/26/1967.

Essentials of urography. By Anthony F. Lalli, M.D., Asst. Professor, Dept. of Radiology, U. of Michigan Medical Center, Ann Arbor, Michigan. 150 pp. Illustrated. Price $12.75. Charles C Thomas, Springfield, Illinois. 1966.

Reticuloendothelioses in childhood. By Harold W. K. Dargeon, M.D., F.A.A.P., Chairman Emeritus, Dept. of Pediatrics & Attending Pediatrician Emeritus, Memorial Sloan-Kettering Cancer Center; Clinical Prof. of Pediatrics Emeritus, Cornell University Medical College; Consulting Pediatrician; St. Luke's Misericordia, Lawrence, and Fitkin Hospitals, N. Y. City Dept. of Health; Special Consultant, U.S. Public Health Service. 127 pp. Illustrated. Price $8.50. Charles C Thomas, Springfield, Illinois. 1966.

Disorders of the respiratory tract in children. Edited by Edwin L. Kendig, Jr., M.D., Professor of Pediatrics, Medical College of Virginia; Director of Child Chest Clinics, Medical College of Virginia Hospitals, Richmond, Va. 834 pp. Illustrated. Price $26. W. B. Saunders Co., Philadelphia, Penna. 1967.

REVIEW

A survey of surgical shock with special reference to fluids, electrolytes and metabolites.

By Joseph H. Pollock, M.D., Cedars of Lebanon Hospital, Los Angeles, California. 710 pp. Price $28.75. Charles C. Thomas, Springfield, Illinois, 1966.

Dr. Pollock had set out to combine in one book a total appraisal of the causes and treatment of shock based on our current understanding of pathophysiology. His avowed goals have been admirably accomplished, for his book contains up-to-date references and discussions of most of the current studies that have been carried out regarding the complex pathways leading to shock. The outline of the book and its various sections follow a logical order with clinically oriented sections that will enable the interested physician to find specific information about certain facets of surgical shock. While Dr. Pollock has endeavored primarily to write about surgical shock, he has not neglected the many areas of the clinical situation which arise as a result of medical problems that may also produce circulatory arrest and hypotension. One of the best features of this volume is found in the specificity of approaches to differential diagnosis, the shock state and its etiology, as well as the specifics as to care and management of such patients. Dr. Pollock provides concise outlines which one can follow in a step-wise manner in caring for patients with various types of shock. These specifics go into detail as to uses of medications, dosages, and routines for the institution of appropriate therapy.

His comprehensive review of the current literature produces discussions which have a somewhat diffuse character. They include all major opinions on a subject without indicating a dominant theme or which opinions are most important for a particular concept. The reader is thus left to his own decision and his own reading in terms of coming to a consensus of the most significant data.

As within a comprehensive book, there are areas where the details and the information are not exactly up-to-date. Examples of this are the inadequate emphasis given to the work of Sheris and his group in terms of extracellular fluid volumes and the part they play in shock state, the inadequate emphasis given to use of bicarbonate in cardiac resuscitation to neutralize the metabolic acidosis which occurs as the result of decreased circulation, and incomplete coverage of such areas as pulmonary embolism, its diagnosis and management.

The primary defect in this book is in the format. While the two column per page layout allows one to present lists and outlines in sequence, it makes for very uneven reading. One's eye must jump back and forth more often in reading a given amount of material printed in this way than if the printing were carried clear across the page. Thus it becomes tiring, especially if one is reading some of the details listed in care and management of specific states. In addition, often where there is a table on the page, instead of the column going clear to the bottom on one side, it jumps over to the top above the table and then begins back in the original column below the table. This makes smooth reading difficult. The book has an excellent number of illustrations that diagramatically emphasize the points that Dr. Pollock is making. The tables and figures are excellent and provide good information to any hospital or institution which desires to set up certain resuscitative routines.

In summary, it is a well-written book which contains a great deal of information. The reader must use, as always, good judgement and his own comprehension of the discussions in order to select that which is most pertinent. The book will be particularly useful to those individuals not usually involved with the treatment of shock who wish to review the pathophysiology of this state and bring themselves up to date in its management.

LOREN C. WINTERSCHEID, M.D.

X-Ray of the Month on Page 645

The examination reveals a normal cardiovascular silhouette and normal lungs. There is complete absence of both clavicles with elevation and rotation of both scapulae. Close inspection also reveals congenital mal-development of the posterior arches of the upper thoracic vertebrae.

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Meetings OF MEDICAL SOCIETIES

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AMA Clinical—Houston, November 26-29, 1967; Miami Beach, 1968.

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Washington State Medical Association—Sept. 10-13, 1967, Seattle

Idaho Medical Association—June 26-29, 1968, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society — Annual Meeting, Sept. 24-27, 1967. Salishan, Gleneden Beach, Oregon
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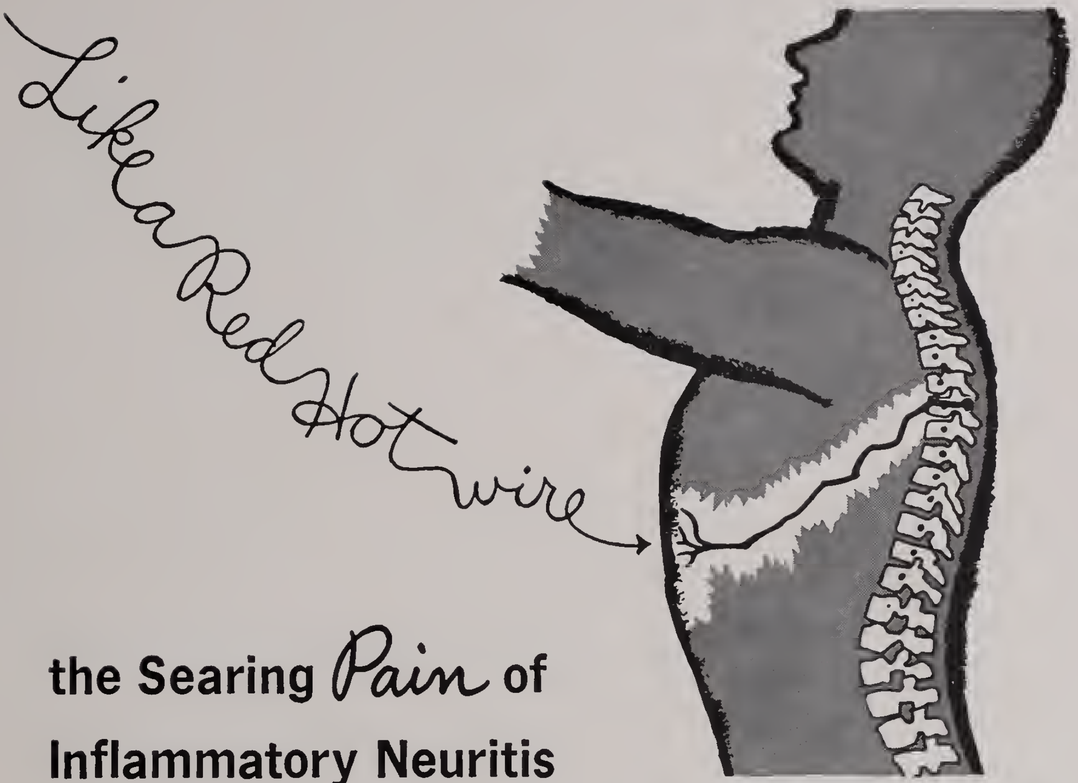
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[1] Furste, W.: International Surgical Digest, Oct., 1966; Summary of the Second International Conference on Tetanus, Bern, Switzerland, July, 1966.

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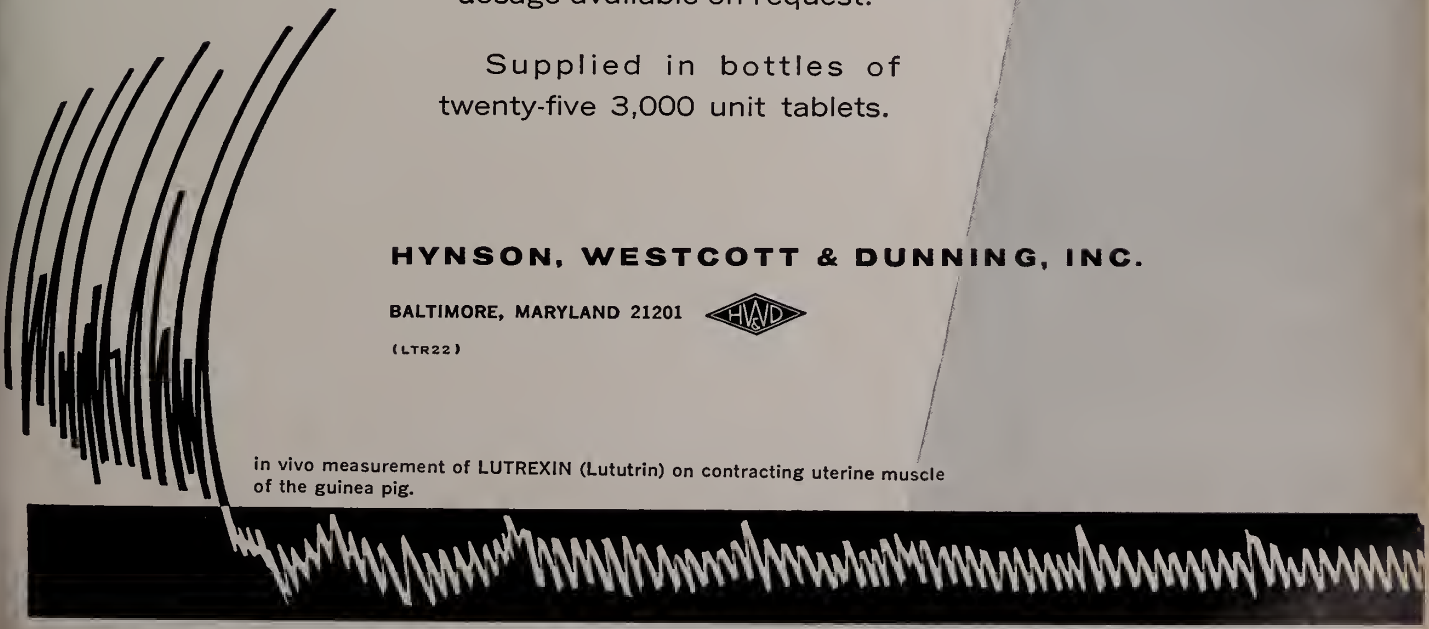

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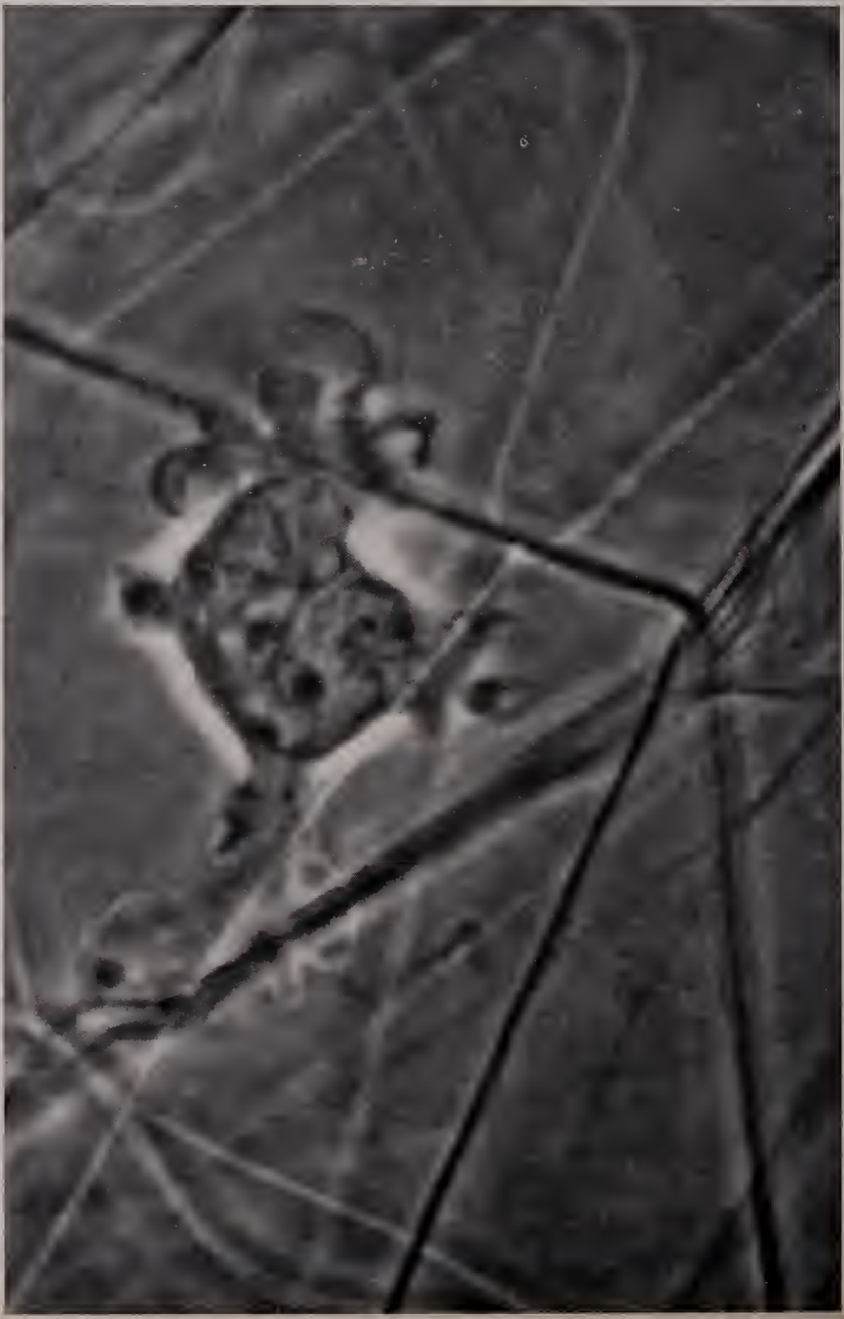
INFLAMMATION:

A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

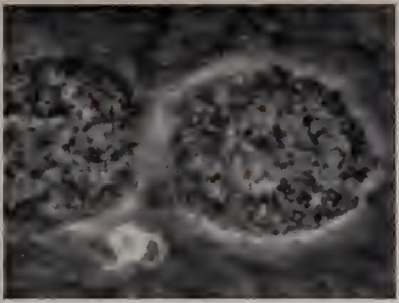


Visual evidence of how corticosteroids influence the inflammatory reaction

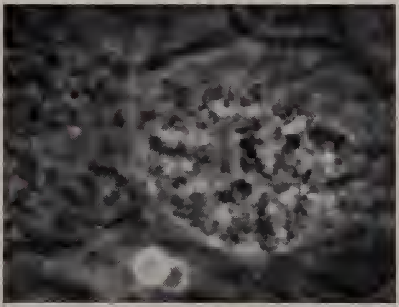
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



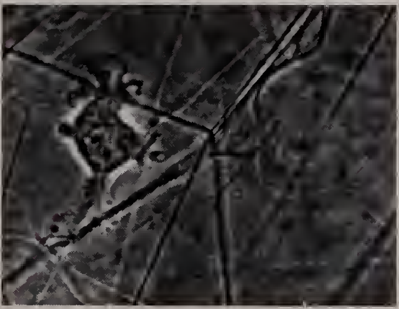
Phase-contrast microscopy showing mast cell before injury.



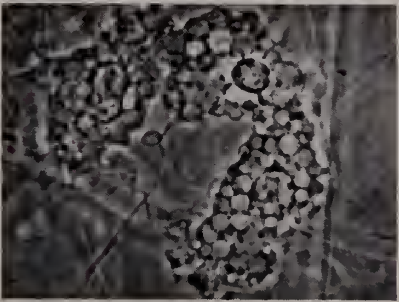
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



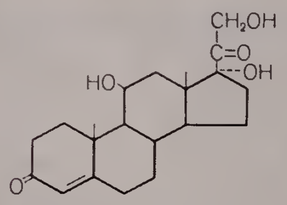
Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.

In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

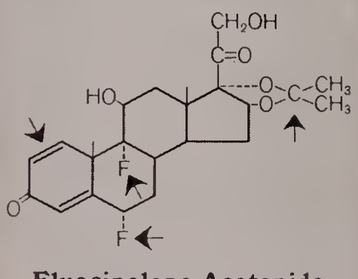
**A New View of Corticosteroid Action in Inflammatory Dermatoses*, a film based on this study, is now available from your Syntex representative.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

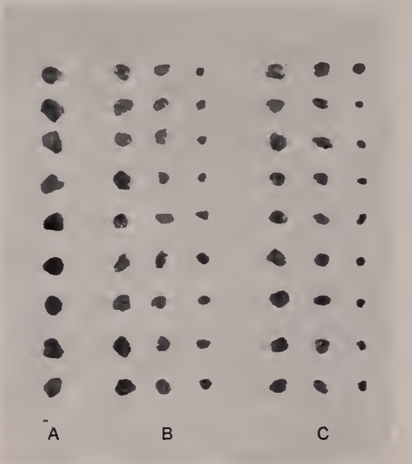


Fluocinolone Acetonide (Synalar)

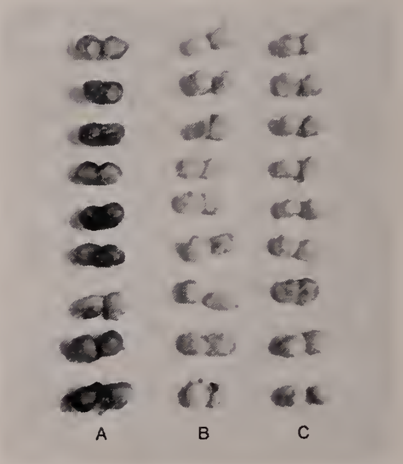
- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at both the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



The Thymus Involution Assay[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.



The Antigranuloma Assay[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

PRESCRIBING INFORMATION

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes. CONTRAINDICATIONS: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. PRECAUTIONS: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. SIDE EFFECTS: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

REFERENCES: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

For inflammatory dermatoses...
by any measure
a topical corticosteroid
of choice

Synalar® (fluocinolone acetonide)

Milligram for milligram one of the most active topical corticosteroids available

Rapid and predictable in antiinflammatory and antipruritic activity

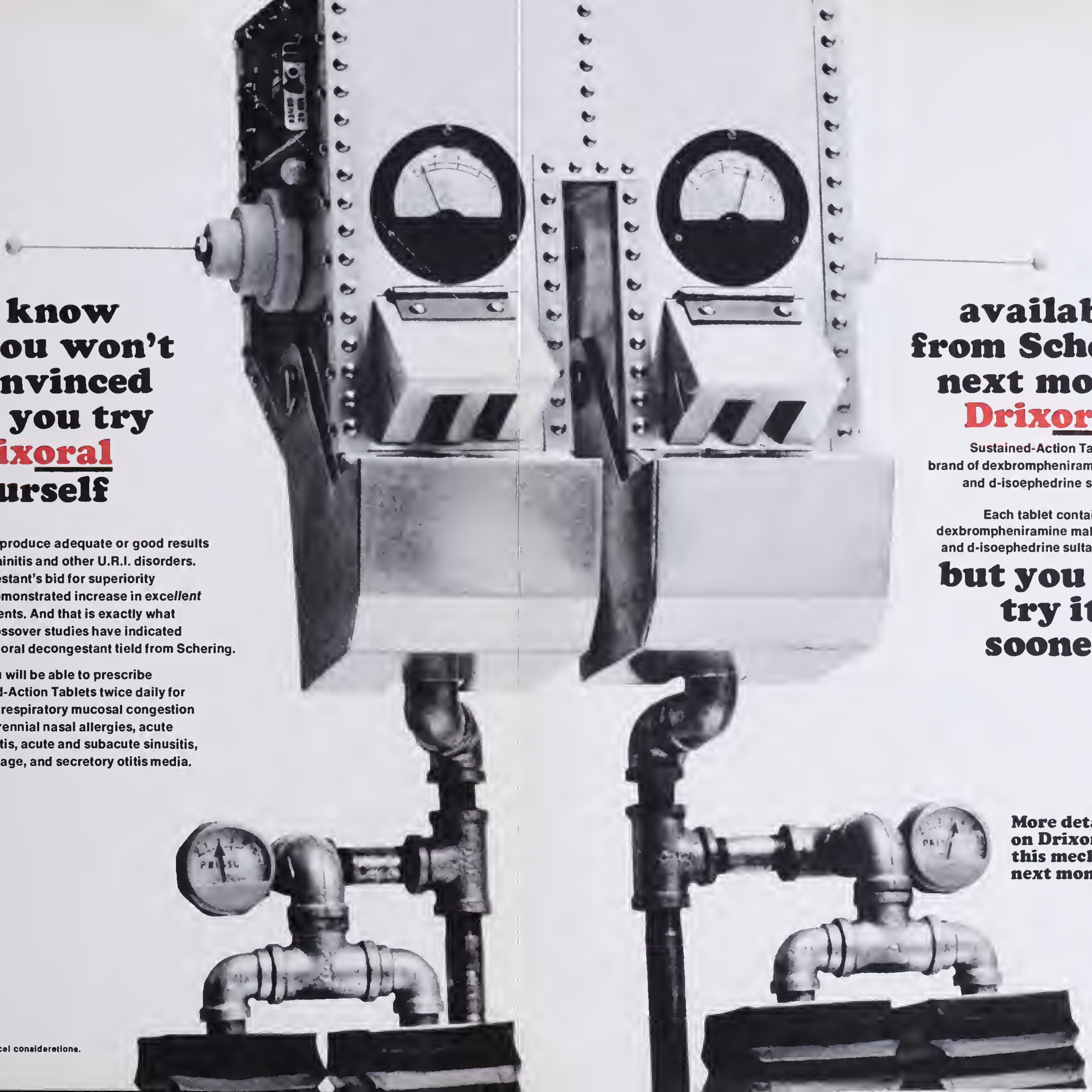
Results often comparable to those of systemic corticosteroids with fewer hazards

Valium
(diazepam)
Roche®

Before prescribing, please consult complete product information, a summary of which follows:
Contraindications: Infants, patients with history of convulsive disorders or glaucoma.
Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.
Precautions: Limit dosage to smallest effective amount in elderly patients (not more than 1 mg, one or two times daily) to preclude ataxia or oversedation. Advise patients against possibly hazardous procedures until correct maintenance dosage is established; driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. Warn patients of possible combined effects with alcohol. Safe use in pregnancy not established. Observe usual precautions in impaired renal or hepatic function and in patients who may be suicidal; periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.
Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, hallucinations); changes in EEG patterns. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.
Dosage—Adults: Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. Geriatric patients: 1 or 2 mg/day initially, increase gradually as needed.
Supplied: Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 for convenience and economy in prescribing.

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Schering



we know that you won't be convinced until you try Drixoral yourself

Most oral decongestants produce adequate or good results in most patients with rhinitis and other U.R.I. disorders. An oral decongestant's bid for superiority must be justified by a demonstrated increase in *excellent* results in *more* patients. And that is exactly what double-blind and crossover studies have indicated about a coming entry into the oral decongestant field from Schering.

Next month, you will be able to prescribe DRIXORAL Sustained-Action Tablets twice daily for 24-hour relief of upper respiratory mucosal congestion in seasonal and perennial nasal allergies, acute rhinitis and rhinosinusitis, acute and subacute sinusitis, eustachian tube blockage, and secretory otitis media.

See last page of advertisement for clinical considerations.

available from Schering next month Drixoral™

Sustained-Action Tablets
brand of dexbrompheniramine maleate
and d-isoephedrine sulfate

Each tablet contains
dexbrompheniramine maleate 6 mg.,
and d-isoephedrine sulfate 120 mg.

but you can try it sooner

More details on Drixoral and this mechanical man next month.

Schering introduces Drixoral™

Double-blind and crossover studies[1-3] show superior results with an oral decongestant, but...

See last page of advertisement for clinical considerations.

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see previous page for special pre-introductory sample offer for New Drixoral™

Sustained-Action Tablets
brand of dexbrompheniramine maleate
and d-isoephedrine sulfate

Each tablet contains dexbrompheniramine maleate 6 mg., and d-isoephedrine sulfate 120 mg.

Clinical considerations: Contraindications—DRIXORAL should not be given to children under 12 years of age. Until animal studies support the safety of this preparation for use during gestation, DRIXORAL should not be administered to pregnant women. *Precautions*—Although isoephedrine causes practically no pressor effect in normotensive individuals, it should be used with caution in patients with hypertension, coronary artery disease and hyperthyroidism. Dexbrompheniramine maleate may cause infrequent and usually mild drowsiness; should this occur, the patient should not engage in mechanical operations that require alertness. *Side effects*—Mild drowsiness has been observed in occasional patients receiving DRIXORAL. Although very infrequent complaints suggestive of sympathomimetic side effects have been noted, possible side effects of sympathomimetic origin include anxiety, tension, restlessness, nervousness, tremor, weakness, insomnia, headache, palpitation, tachycardia, angina, elevation of blood pressure, sweating, mydriasis, anorexia, nausea, vomiting, dizziness, constipation, and dysuria due to vesical sphincter spasm. For more complete details, consult package insert or Schering literature available from your Schering Representative or Medical Services Department, Union, New Jersey 07083.

References:
1. Pullen, F. W. 2nd, and Montgomery, W. W.: Arch. Otolaryng. 77:24, 1963.
2. Frank, D. I.: Curr. Therap. Res. 6:158, 1964.
3. Fierberg, A. A.: Ann. Allergy 22:324, 1964.

S-261

Like a Red Hot wire

the Searing *Pain* of
Inflammatory Neuritis

PROTAMIDE®

colloidal solution
of denatured
proteolytic enzyme

provides the *selective* fast-acting relief . . .

Repeatedly in published clinical studies,[1-10] investigators stress the following therapeutic characteristics:

- relief of inflammatory pain (non-traumatic) is prompt—particularly when administered early.[1-4]
- disability time is shortened from weeks to days.[7]
- so specifically effective is Protamide that a positive response is diagnostic of inflammatory neuritis.[3,4]
- prompt relief is observed even in ophthalmic herpes zoster.[5,6]
- incidence of sequelae such as postherpetic neuralgia is reduced.[1-4]
- consistently described as the therapy of choice.[1,3-6]

Administration:
In neuritis and herpes zoster, one ampul I.M. daily for 2 to 5 days usually relieves pain completely in patients treated early. Well tolerated.[1-10] However, inadvertent intravenous administration may cause anaphylactoid reaction.

—Boxes of 10 ampuls, 1.3 cc. each.—

References: (1) Baker, A. G.: Penn. Med. J. *63*:697-698 (May) 1960. (2) Smith, R. T.: New York Med. *8*:16-19 (Aug. 20) 1952. (3) Smith, R. T.: Med. Clin. N. America (March) 1957. (4) Lehrer, H. W.; Lehrer, H. G., and Lehrer, D. R.: Northw. Med. *54*:1249-1252 (Nov.) 1955. (5) Sforzolini, G. S.: Arch Ophthal. *62*-381-385 (Sept.) 1959. (6) Shupala, E.: W. Virginia Med. J. *56*:191-193 (June) 1960. (7) Xander, G. W.: Western Med. *1*:14-17 (Sept.) 1960. (8) Combs, F. C., and Canizares, O.: New York J. Med. (Mar. 15) 1952, pp. 706-708. (9) Marsh, W. C.: U.S. Armed Forces Med. J. *1*:1045 (Sept.) 1950. (10) Love, T. R.: Rocky Mountain Med. J. *50*:873 (Nov.) 1953.

Sherman Laboratories
Detroit, Michigan 48211

NOTES

A phone call from Chicago to Boston, December 2, 1942, may have been one of history's most significant messages. On that date Arthur Holly Compton called James B. Conant to say, "The Italian navigator has landed in the New World." Conant asked, "How were the natives?" Compton replied, "Very friendly." That was all Conant required to know that the first atomic pile reaction had taken place in the Argonne National Laboratory of the University of Chicago. Fifteen words were enough to announce the ushering in of a whole new world. Whether it is brave or not remains to be seen.

You may expect a campaign, of gradually increasing intensity, on reduction of "medical costs." The implication will be that skyrocketing costs are due to increases in physicians' fees. First move in the campaign was the National Conference on Medical Costs, called by President Johnson. In Idaho, A. Curtis Jones, Boise, sees threat in a letter from a representative of HEW - see summary report of his report to Idaho House of Delegates, this issue.

Government propaganda flood. The Office of Economic Opportunity has special authority to ignore the rule prohibiting governmental agencies from mailing information to those not requesting it. The OEO can flood the mails, any time, with any propaganda it wishes to put out. The National Federation of Independent Business, while supporting an increase in third class postal rates, has called attention to this propagandizing through the mails and requests that it be discontinued.

Data from Sealab II. Scott Carpenter, who transferred stratosphere to aquasphere, spent 30 consecutive days under the sea in Sealab II. Twenty-eight others spent 15 days each. All had minor physiologic changes but all recovered promptly. Depth was 205 feet, pressure 7 atmospheres. Their "air" contained 3.5 to 5 per cent oxygen, less than 18 per cent nitrogen, less than 0.4 per cent carbon dioxide, and 77 to 79 per cent helium. Temperature was 85 to 89 F and relative humidity about 76 per cent. Body temperature, pulse rate, and blood pressure all rose immediately after descent, fell somewhat after a few days. Encephalograms showed transient changes, no permanent change. Erythrocyte counts and hemoglobin fell, hematocrit and leucocyte counts changed very little, but neutrophils decreased and were replaced by enough lymphocytes to maintain the total count. Serum glutamic oxaloacetic transaminase, serum glutamic pyruvic transaminase, and lactic acid dehydrogenase all rose significantly. Sealab III will be at depth of 430 feet, off San Clemente Island, during spring of 1968.

Don't let monilia cut broad-spectrum therapy short…

start with Tetrex-F®

tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract… and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

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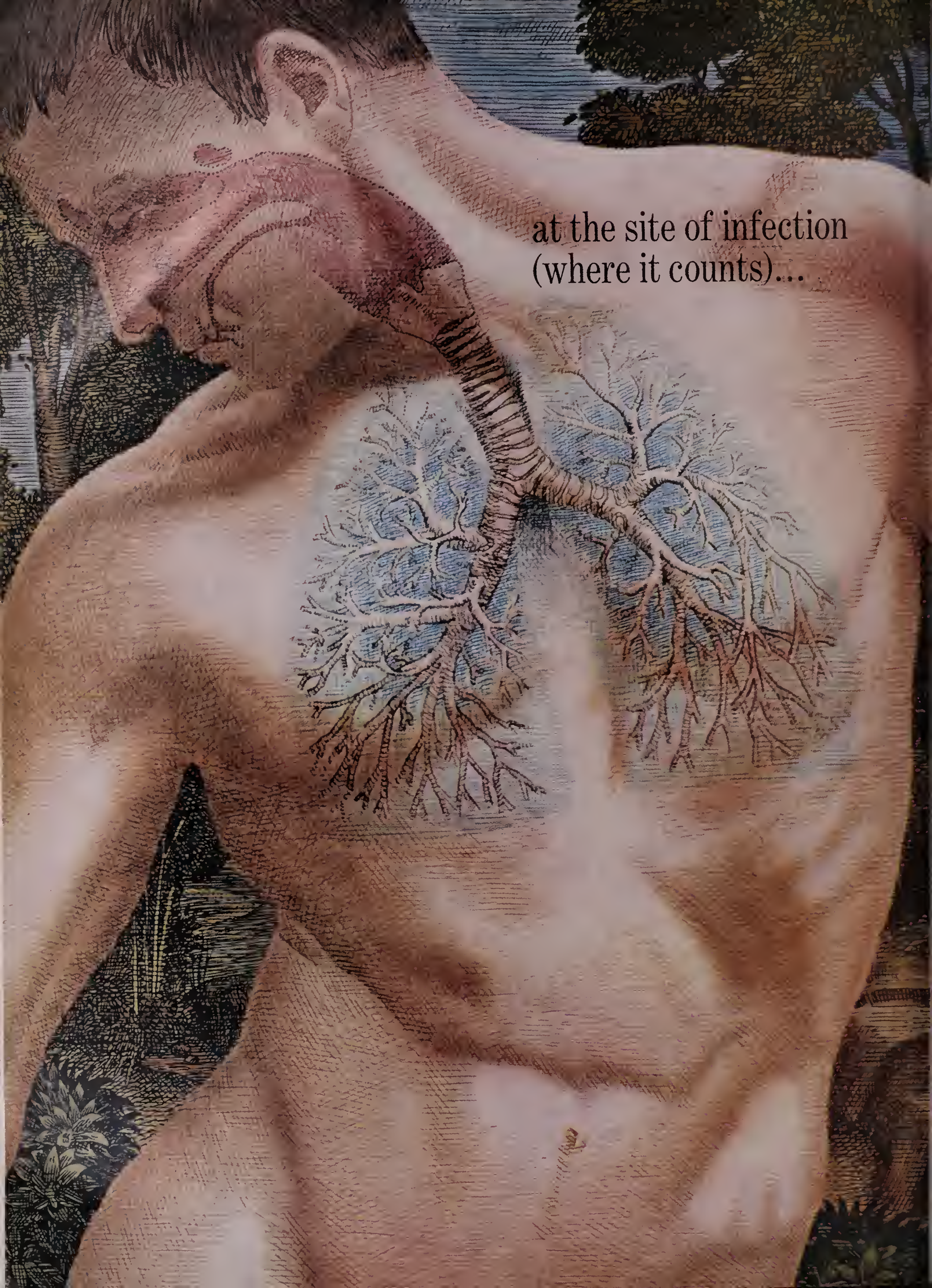
Division of Bristol-Myers Company
Syracuse, New York 13201


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Now available:
New! Ready-mixed Ilosone Liquid 125! (Contains erythromycin estolate equivalent to 125 mg. erythromycin base per 5-cc. teaspoonful.)

700970

Ilosone®
Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have also been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Adverse Reactions: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have developed in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly, usually within forty-eight hours, if the drug is readministered to sensitive patients. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®, Ilosone Liquid 125, Ilosone, 125, for Oral Suspension, Ilosone Drops, Ilosone Chewable Tablets.

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Ilosone Liquid 125, Oral Suspension, U.S.P., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60-cc. and pint-size packages.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50. [032767]

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request.
Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

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This department is a forum, provided for free individual expression. Letters are published as received and given little or no editing. Proof is submitted when time permits, before publication. Responsibility for statements rests with the authors of these communications and not with this journal which strives only to protect the right of individuals to speak for themselves. Ed.

Patients for Furunculosis Study

Editor, NORTHWEST MEDICINE:

The Division of Dermatology of the University of Washington is carrying out a study on the therapy of recurrent staphylococcal furunculosis. Therapy is carried out at no expense to the patients, and a full report will be submitted to the referring physician. The study will be limited to patients in the greater Seattle area.

If you have any patients you wish to refer, please call the Division of Dermatology at 543-5290.

Yours truly,
JOHN E. MILNER, M.D.

Opportunity to Compare

Editor, NORTHWEST MEDICINE:

It is regrettable that only the readers of NORTHWEST MEDICINE have had the opportunity to compare the letter by Al Diefenbach, Medical Editor of *The Seattle Times,* in your July issue with mine in your April issue and with the article in the October 31, 1966 issue of *JAMA* to which both refer. Diefenbach's interesting mental processes and the ethical quality of their product deserve wider publicity in view of the position he holds.

Sincerely yours,
F. B. EXNER, M.D.
Seattle, Washington (98101)

Encyclopaedia Britannica

Editor, NORTHWEST MEDICINE:

I would like to suggest that this letter be filed under unfortunate mistakes. Keep the commercial sales pitches to the paid advertising pages of the magazine.

Sincerely,
CARL H. HILDEBRAND, M.D.
Seattle

Editor, NORTHWEST MEDICINE:

I sincerely loathe this cheap commercial intruding on our professional relationship.

GEORGE A. FALKNER, M.D.
Walla Walla

These letters are in response to the second mailing on the Encyclopaedia Britannica purchase offer. Two similar letters were received after the first mailing. Both mailings were to more than 6,000 individuals.

The set of the Encyclopaedia to be awarded in the manuscript contest, announced in the April issue, is now on display in the office. Set and cabinet, contributed by Encyclopaedia Britannica, are valued at more than $500. Cost of the plaque will be met from the Encyclopaedia Britannica fund.

It is our understanding that most of those purchasing the Encyclopaedia are those who have been wanting the set for some time and that they have been happy to take advantage of the savings offered. Encyclopaedia Britannica can make the offer because selling costs are reduced by the plan. Ed.

When Statistics Were for Science

Editor, NORTHWEST MEDICINE:

I am inclined to agree with Al Dieffenbach that all science writers are not spoonfed, uncritical, or ballyhooers. Certainly there are some good ones who are not only intelligent, but original thinkers. Nevertheless, there are not enough new discoveries of importance to match the volume of rhetoric and speculations for each weekly issue. Consequently, rehash and hokum creep in frequently to the tune of 90 per cent or better. Therefore, Dr. Exner has his point too.

But pure science seeks verifiable truths. We should not focus our attention upon the personalities of the people doing the talking but examine critically the statements made. When the final word of history is written on fluorine metabolism, it is highly probable that Dr. Exner will take a respected place in science and medicine.

Some science comes very slowly. The highly competent and highly observant dentist McKay took nine years to find out that the mottled tooth only occurs the first nine years of life. Embryology books tell us that as soon as the ameloblasts form the enamel, they disappear. Smith and Smith research chemists from Arizona produced mottled teeth by feeding fluorides to rats in 1929. They were co-discoverers of fluorine being the cause of mottled teeth. In 1940 Smith and Smith, surveying St. David, Arizona, found that mottled teeth were more fragile and did not hold their fillings very well. Cantarow and Schepartz in their book *Biochemistry* by Saunders state that the mottled tooth "pits, chips, and fractures easier."

I do not deny that after more than two decades of false conditioning that it is difficult to believe that the denied evidence of systemic toxicity resides right in the keystone of the fluoridation proposal. It is equally difficult to believe that fluorides taken systemically in the one part per million cause mechanically defective teeth in ten per cent of children. But the difficulty in belief is the psychological problem concerning itself with Pavlov's conditioned reflex, and is not related to the biochemical nature of fluoride ions which, unlike chloride ions, cause toxic degeneration of enamel forming cells in children.

I do not know how anyone is going to judge the validity of anybody's statistics without participation in them, but I sincerely doubt that 70 per cent or the more customary 60 per cent figure of tooth decay prevention. Washington, D.C., fluoridated in 1952. Between 1952 and 1965 they seemed to have lost about 23,000 population but gained 189 dentists. Corvallis, Oregon, also fluoridated in 1952 and between 1952 and 1965 the general population less than doubled but the number of dentists more than doubled. Coos Bay, Oregon, which fluoridated in 1957 follows a similar pattern of a proportionate increase in dentists with the respect to the general population.

Is there any science writer or scientist that can tell us where the alleged beneficial systemic site of action for fluorine is in the bones and teeth? Is it biological and intracellular or is it a simple chemical extracellular benefit? I have written Dr. Hegsted of Harvard concerning this. He has told me the site of action is not definitely known. I have a routine letter from one of the drug companies stating the F.D.A. wants verifiable proof of the systemic site of action, which the mentioned drug company is attempting to find out for us.

Locally, the site of action is easier to understand. Ions in dilute concentration strong enough to get past the calcium barrier in the gut and cause mottled teeth, may be expected to knock over a few bacteria or slow them down. Early dental experiments describe a lessened lactobacillus count in the oral cavities of children drinking fluoridated water. But this was when statistics were for science not salesmanship.

Very truly yours,
ROY E. HANFORD, M.D.
Roseburg, Ore. 97470

Riker Welcomes Visitors

Editor, NORTHWEST MEDICINE:

It has occurred to us that there might be some interest among your readers in just how an ethical pharmaceutical firm operates, how new compounds are formulated, how they are tested, how they are investigated clinically, how they are manufactured, and how they are marketed. There is considerable misunderstanding about this process of late.

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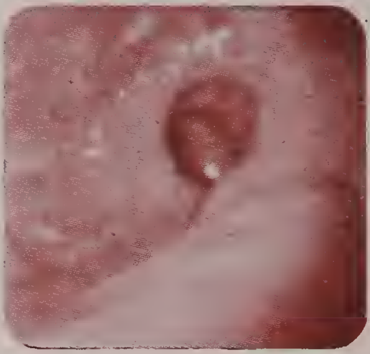
Intragastric photograph of pyloric region showing complete relaxation of pyloric sphincter with 6 mg. of Pro-Banthīne intravenously.



AN IMPORTANT PROBLEM in managing gastrointestinal disorders has been the choice of an anticholinergic agent which will act positively and selectively on the gastrointestinal tract without extensive secondary effects.

Recent direct observations with the cinefibergastroscope and intragastric photography[1] visually confirm previous evidence that Pro-Banthīne does, indeed, possess such selective activity.

Barowsky and his associates demonstrated that a minimal dose of 6 to 8 mg. of Pro-Banthīne intravenously produced complete relaxation of gastric activity. Secondary effects were not significant.

By contrast, it required 0.8 mg. or double the usual dose of atropine intravenously to achieve similar gastric relaxation. Side effects of this dosage of the belladonna alkaloid were pronounced. Ventricular rates were as high as 150 per minute.

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Contraindications: In glaucoma or severe cardiac disease.

Precautions: Since varying degrees of urinary hesitancy may occur in the elderly male with prostatic hypertrophy, this should be watched for in such patients until they have gained some experience with the drug.

Although never reported, theoretically a curare-like action may occur with possible loss of voluntary muscle control. Such patients should receive prompt and continuing artificial respiration until the drug effect has been exhausted.

Side Effects The more common side effects, in order of incidence, are xerostomia, mydriasis, hesitancy of urination and gastric fullness.

[1] Barowsky, H.; Greene, L.; Bennett, R., and Buganza, G.: The Effect of Anticholinergic Drugs on Gastric Motility and Pyloric Function, Scientific Exhibit, Annual Convention of the American Medical Association, Chicago, Illinois, June 26-30, 1966.

SEARLE *Research in the Service of Medicine*

Staff Responsibility in a Changing Hospital Environment

In the fall of 1961, Robert Zollinger, upon the occasion of his becoming President of the American College of Surgeons, delivered an address entitled "Surgical Tithing." This was based on the old concept whereby a man was expected to give to his church a tenth part of his wordly income. It was Zollinger's suggestion that each physician give one-tenth of his time as a tithe to improve his profession and in turn to insure better care of his patients. I don't suppose he expected everyone to take him entirely literally, but he certainly planned to impress upon his listeners his conviction that every physician had an obligation to review and upgrade the work in his hospital, to abide by his Hippocratic oath to train his successors, and to participate in continuing education. It seems to me that this is the chief responsibility which falls upon the members of a hospital staff in regard to continuing education: to be willing to give of their time, their most precious commodity.

At a recent meeting of the Medical Advisory Committee of the Catholic Hospital Association, the sentiment was expressed that hospitals should not even consider becoming involved in intern and residency training until a strong intramural program of continuing education for the practicing physicians was first established within the hospital. This is a statement of responsibility that, I am sure, will come as a shock to many staff members, who in the past have felt that having an intern and resident program fulfilled the educational responsibilities of their hospitals.

The accredited teaching hospitals, university and community alike, represent 20 per cent of the hospitals in the United States and contain 47 per cent of the nation's hospital beds. Eighty per cent of the hospitals representing 53 per cent of the total beds, have no accredited educational program for interns and residents. How important it is that the staffs of these hospitals, in particular, realize their responsibilities in regard to continuing education if they are to serve their communities properly. Fortunately, in the last few years, many universities have abandoned the concept that medical education is a terminal program and have become increasingly willing to assume the obligation for the continuing education of their graduates and of others in their geographical domain, particularly now that Federal funds are becoming available to make such an activity feasible.

An ever increasing number of hospitals currently are seeking medical school affiliation in order to upgrade and maintain accreditation of their training programs. In response, a few medical schools are beginning to regard the supervision and teaching which this entails as a community service responsibility and are willing to become involved. The end result of such a program one would hope might eventually prove mutually advantageous. However, it would be a grave mistake if the hospital were to seek any type of affiliation, even if only for a program of continuing education, were the objective solely to shift the responsibility for the program from the staff of the hospital to the staff of the school. It would seem that the success of any program of continuing education would be largely dependent on the amount of local initiative, ingenuity, enthusiasm and sense of responsibility contributed by the individual hospital. Finally, having lived up to their responsibilities to themselves, the staff members of a large community hospital have unlimited opportunities to be of service to their colleagues in smaller hospitals in adjacent communities and rural areas.

Richard Magraw, in his thought-provoking book *Ferment in Medicine* says, "Probably the single most important institution influencing medical practice and medical care in the United States at the present time is the hospital. Even if the many other social, technical, scientific and economic factors acting to alter medical care were somehow nullified, sweeping alterations in medical practice would inevitably result from changes now occurring in hospitals."

It behooves the medical staff periodically to review and appraise its function, responsibility and organization, as medical science becomes more complex and the role of the hospital becomes increasingly important. C. Wesley Eisele pointed out, at the recent

AMA Socio-Economic Congress, that a decade or so ago, a patient could receive a complete cardiac workup in the physician's office. Now it may involve a team effort and a quarter of a million dollar's worth of hardware weighing ten tons. As the physician becomes increasingly dependent upon the hospital, his career and reputation depend on the availability of staff privileges. He is at the mercy of facilities which he doesn't own and employees he doesn't hire. He may even have the unpleasant feeling that the hospital is encroaching upon his traditional role and usurping his responsibilities.

The day of the physician as an individual entrepreneur, with the hospital as his workshop, is gone forever. The day of the medical staff as an independent autonomous self-governing body is gone as well. Physicians who work in the hospital are now part of the "team effort." To work effectively this team must be a highly integrated living organization made up of the governing body, medical staff, nurses, technicians and other employees, all playing a coordinated role. Although the ultimate moral and legal responsibility for the operation of the hospital rests with the governing body, the actual process of carrying out, supervising and evaluating professional activities which take place in the hospital is of necessity, the responsibility of the staff.

The function of the staff is two-fold: 1. Clinical, which entails rendering proficient service to the patient, carrying on educational and research projects, periodic auditing of the work done and maintenance of efficiency; 2. Medical administrative, which means advising the governing body without attempting to usurp its rights or powers. The staff should be able to participate in decisions affecting medical practice in the hospital. It is a wise governing body that consults the staff in certain phases of hospital planning, construction, purchase of equipment and problems concerning key personnel. If the governing body proposes increasingly to concern itself with staff activities, it is essential that the staff have representation on the governing body. This should be in a minority ratio but with the right to vote. Joint conference committees, although successful in some hospitals are not the equivalent of direct representation. Moreover if the governing body professes to represent the community, it should indeed be broad-based, geographically local, and truly representative.

The staff must make proper recommendations to the governing body regarding applicants for staff appointments, and the privileges to be extended to these applicants in the various categories of clinical work. It is the obligation of the staff to maintain constant vigilance and guard against such unethical practices as ghost surgery, fee-splitting, unnecessary operations, and abortions, and to carry on a continuing review of all the work being done in the hospital. Self discipline and quality control are grave responsibilities. It is essential that the staff recognize the authority of the governing board to whom it is responsible for the quality and ethical character of work carried on at the hospital, but in return it should be able to count on the full backing of the board in its attempts to achieve these aims.

Recently a great deal of attention has been focused on our efforts at self evaluation and control. A hostile press not infrequently suggests that these efforts leave much to be desired and that the widely touted, high-quality American medicine is, in fact, shoddy. There is nothing new about quality control and self discipline but currently, pressures are being applied from a number of quarters to ensure that these activities are in fact being carried out effectively and conscientiously and do not exist solely as high-sounding phrases in the staff bylaws.

One source of pressure is the public. There has been a change in recent years in the attitude of the public toward hospitals. Once regarded as a place where the poor went to die, now many people think of going to the hospital rather than calling a doctor. The explosive increase in emergency room utilization is one example of this trend. The hospital is regarded as a community health center. An affluent society which has paid out a lot of money for hospital care, has invested extensively in prepaid health insurance and has seen tax dollars used for hospital construction and research activities, feels that it has an increased stake and interest in the hospital. As a result, even our private hospitals are becoming quasi public institutions and the public feels it should have some say about what goes on within their walls. There is an increasing trend toward consumer representation in every phase of the so-called health services industry. This has been reflected in some of the new legislation such as Public Law 89-749, the Comprehensive Health Planning Act, in which a majority of the members of the advisory committees must be consumers.

Second source of pressure is the governing body of the hospital. The governing body presumably represents the community and protects public interests, but more particularly, it has the moral and legal responsibility for what goes on in the hospital. A recent decision by the Supreme Court of the State of Illinois, in the Darling Case, has extended this to include professional standards and patient care. When the standards set up by such public agencies as the Health Department and private agencies such as the Joint Commission, are not being met, the courts have held the governing body liable. Hence the Board's increased interest in what the staff is doing.

Third source of pressure is the activity of the Joint Commission on Accreditation of Hospitals. The Joint Commission maintains constant surveillance of most of the hospitals in this country and what goes on in them. It is constantly revising its standards and requirements upwards and encouraging hospitals in the pursuit of overall excellence.

Fourth source of pressure has been Medicare legislation. The hospital standards and quality controls required by these laws are not really new but there is increased emphasis on their enforcement.

The discharge of these varied and heavy responsibilities is only possible in the presence of a strong staff organization. A strong staff organization can establish high standards and effectively enforce and maintain them. It can protect the interests of the staff while maintaining high quality care. The traditional musical chairs type of loose staff organization in which the president serves for only a year and does little more than act as presiding officer at the staff meeting, does not make for strong staff organization. To select nice old "Joe Blow" as president simply because he has been around a long time and has never hurt anybody's feelings, and then give him the privilege of perpetrating the annual re-shuffle of all the committee chairmen, doesn't make for strong staff organization. Some hospitals have sought to remedy this by differentiating between the staff president and the chief of staff, having the chief of staff a strong individual appointed by the administration and making him responsible to the governing body. An alternative plan has been the employment of a full-time medical director who functions as the chief of staff. In some areas full or part-time department heads also are hired by the governing body. All of these individuals enjoy tenure as long as the governing body wishes to keep them. There may still be a president of the staff who represents staff interests and who sits on the executive committee with the appointed department heads and medical director. This committee may choose its own chairman or the medical director may serve as chairman.

This is certainly a trend toward more rigid evaluation of staff members, with continuing good performance an absolute requirement for continued staff privileges. One hears the terms, "being one's brother's keeper" and "running a taut ship." The question is, how far does one go with this tightening up process? A taut ship concept exists in military hospitals but does not always insure the best possible medical care. Many conscientious and well-trained physicians rebel under constant scrutiny, control and regulation—men who as freedom-loving souls would inherently render good care stimulated by free competition with their peers and guided by the dictates of their own consciences. The spectre of Big Brother constantly prying and spying is not a pleasant one.

In conclusion, possibly the most important consideration is that the staff maintain constant awareness of the changes, trends and pressures currently in operation and make certain that staff organization is capable of meeting the demands placed upon it, lest by default control of the care of the sick pass into hands other than those of physicians. ■

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Advantages of Femoro-Cerebral Catheter Angiography

VINCENT C. HINCK, M.D./ERIC P. BENSON, M.D. Portland, Oregon

Transfemoral approach, using a coronary catheter with added, preformed curves, permits selective catheterization of cerebral vessels. The filling obtained yields excellent angiograms. The method offers safety, minimal patient discomfort, and the most information for the least effort.

Since percutaneous guided catheterization was first introduced to the United States[1] it has gained universal acceptance for the angiographic study of most organs and systems throughout the body. In the trend from direct, percutaneous to selective, catheter technique, neuro-angiography has lagged. Being difficult to examine by direct approach, the vertebral arteries are generally studied by catheter from the brachial artery but the carotid arteries are still customarily injected by direct puncture.

Though some Scandinavian centers use the direct, percutaneous approach to cerebral angiography, others favor use of Odman catheters introduced via the femoral artery. Through observation of their work, and through our own experience with both methods, we have become convinced that the femoral approach is safer, that it is less traumatic, and that it can give comparable or better filling in most instances. However, we do not feel that the Odman catheter provides the best answer for selective cerebral angiography. In fact, we agree with the prevalent opinion that selective studies using Odman catheters tend to be unduly time-consuming in the hands of the average operator.

Since last summer we have been working with a catheter that was first described in 1965.[2] This catheter has since been modified for easy performance of coronary angiography.[3] We are using the coronary modification but have added preformed curves specific for the study of carotid and vertebral arteries. We find that its use has simplified selective, femoro-cerebral angiography. The catheter will be described in a separate publication.

The transfemoral technique is the only one that gives a one-puncture approach to all four major cerebral arteries. Accordingly, given a difficult diagnostic, neuro-angiographic problem demanding maximum flexibility of operation, femoro-cerebral angiography offers the best chance for the most information with the least effort. It also assures the patient less discomfort. In the present communication, we want to emphasize the advantages of femoro-cerebral angiography by illustrating its use in an interesting case.

CASE REPORT

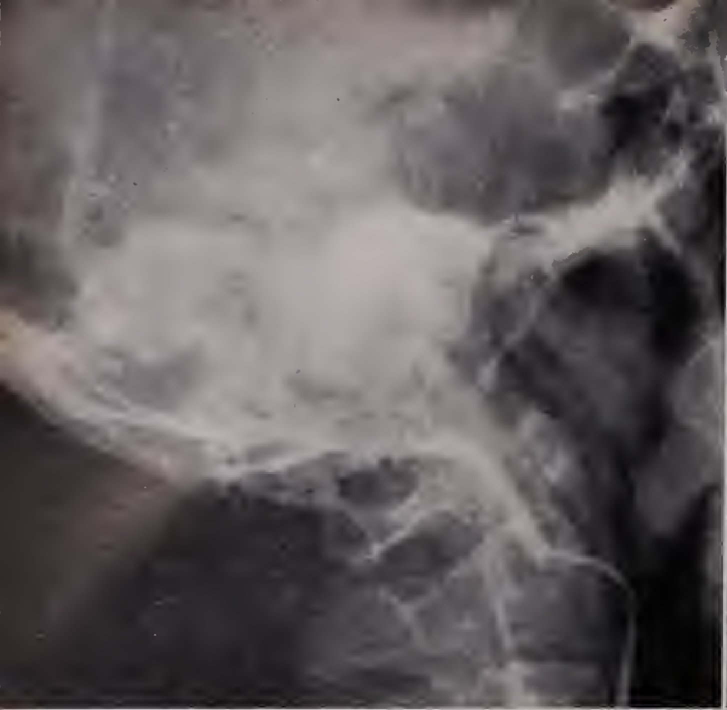
A 55-year-old laborer was referred to the Medical School Clinics in February because of a six-week history of staggering gait. His staggering was so pronounced that he was often assumed to be drunk. Past history was remarkable only for a chronic hearing loss on the right side without associated history of ear drainage. On examination he was found to have a cyst filling the right external auditory meatus. There was also evidence of partial blindness.

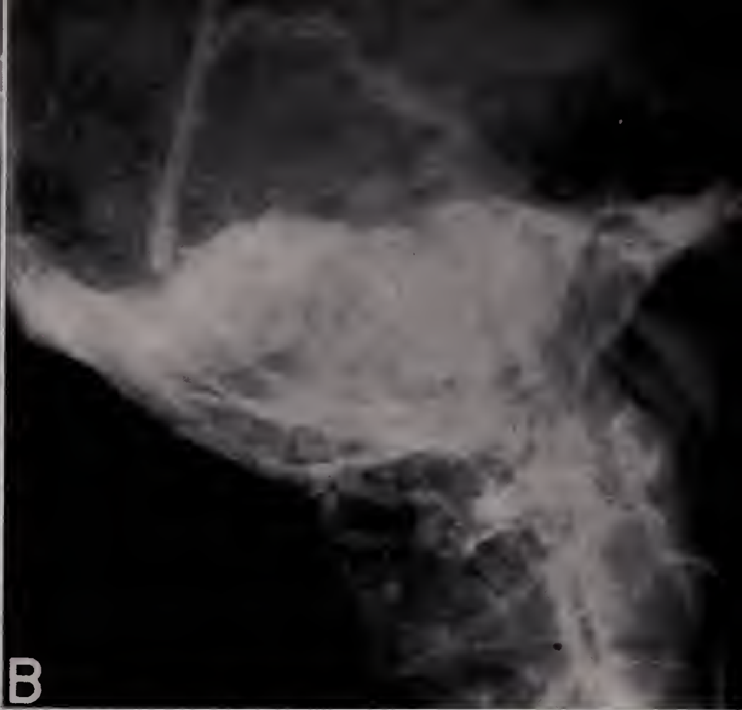
He was admitted to the hospital in March. General physical examination revealed impaired vision and impaired sense of equilibrium. Cranial nerve examination showed deficit of I and V bilaterally. On the right, cranial nerves VI through X and XII were also deficient. Bruit was noted in the right carotid artery. The remainder of the physical examination was noncontributory.

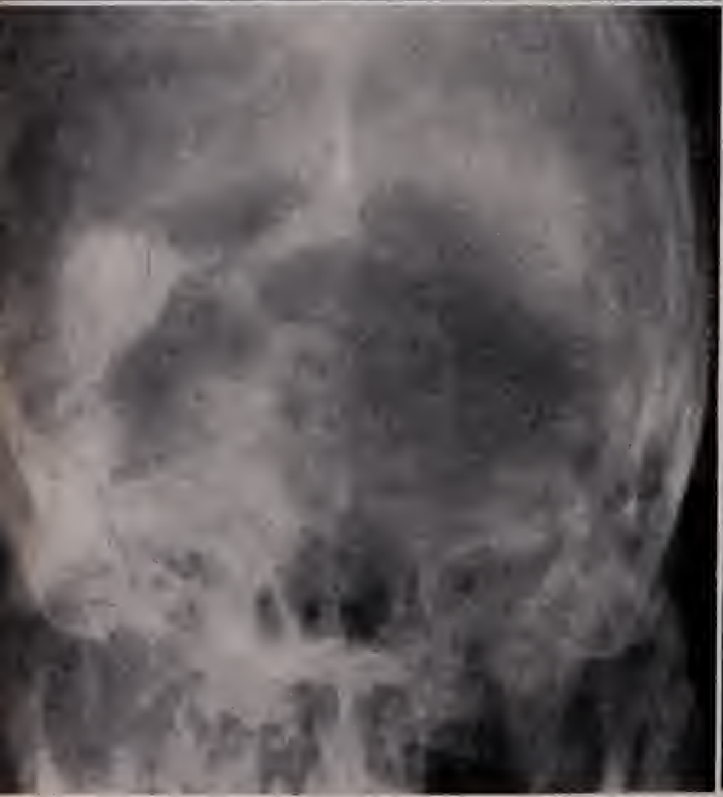
Laboratory. No significant abnormalities were discovered in routine examination of urine, blood, and spinal fluid. Brain scan showed increased uptake at the base of the skull in the right occipito-temporal region.

Roentgenology. Conventional skull radiographs and frontal laminagrams revealed the following: There was a moderately large retropharyngeal mass. The pituitary fossa was enlarged. (This was due to obstructive hydrocephalus with dilatation of the third ventricle.) There were osteolytic changes in the right middle fossa with obliteration of the foramina ovale, spinosum and lacerum. Destructive changes in the right petrous pyramid, were noted to involve the internal auditory canal, the semicircular canals and structures in the outer ear. In the pyramid, osteolytic lesions mingled with areas of osteosclerosis. The right posterior fossa was remarkable for its productive bone changes that were manifest by thickening of the floor, and sclerosis of the subjacent occipital condyle.

Angiography. By percutaneous technique, a catheter was directed into the right femoral artery and threaded up to the aortic arch from which we selectively examined the occipital branch of the right external carotid artery, the ascending trunk of the artery above its occipital branch, the right internal carotid artery, the left common carotid artery and







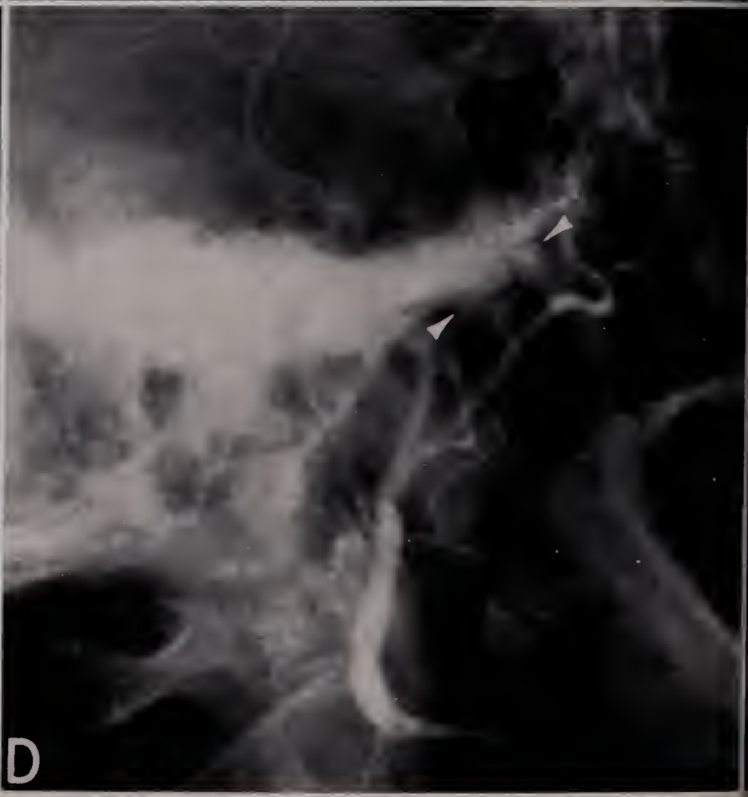


Fig. A, B, C. Occipital branch of right external carotid artery. Note enlargement of artery, early opacification of posterior fossa tumer (compare with posterior fossa in Figure E), prompt drainage into large anomalous veins. Note also the enlarged deep muscular collaterals in the neck posteriorly (Figure B) and the retropharyngeal mass.

Fig. D. Right external carotid artery above occipital branch orifice. A small nest of tumor vessels in the retropharyngeal mass, fed by internal maxillary artery, manifested by stippling (between arrows). Compare with B.

the right vertebral artery. The findings are summarized below and illustrated in Figures A through G.

The occipital branch of the right external carotid artery (Figures A - C) is enlarged. It ramifies at the base of the skull and penetrates the floor of the posterior fossa. Contrast substance quickly fills a large, highly vascular tumor which is well delineated superiorly and medially but not anteriorly. Large anomalous veins drain promptly to the mid-line. Numerous enlarged deep, muscular, collateral channels are also visible posteriorly in the neck. The

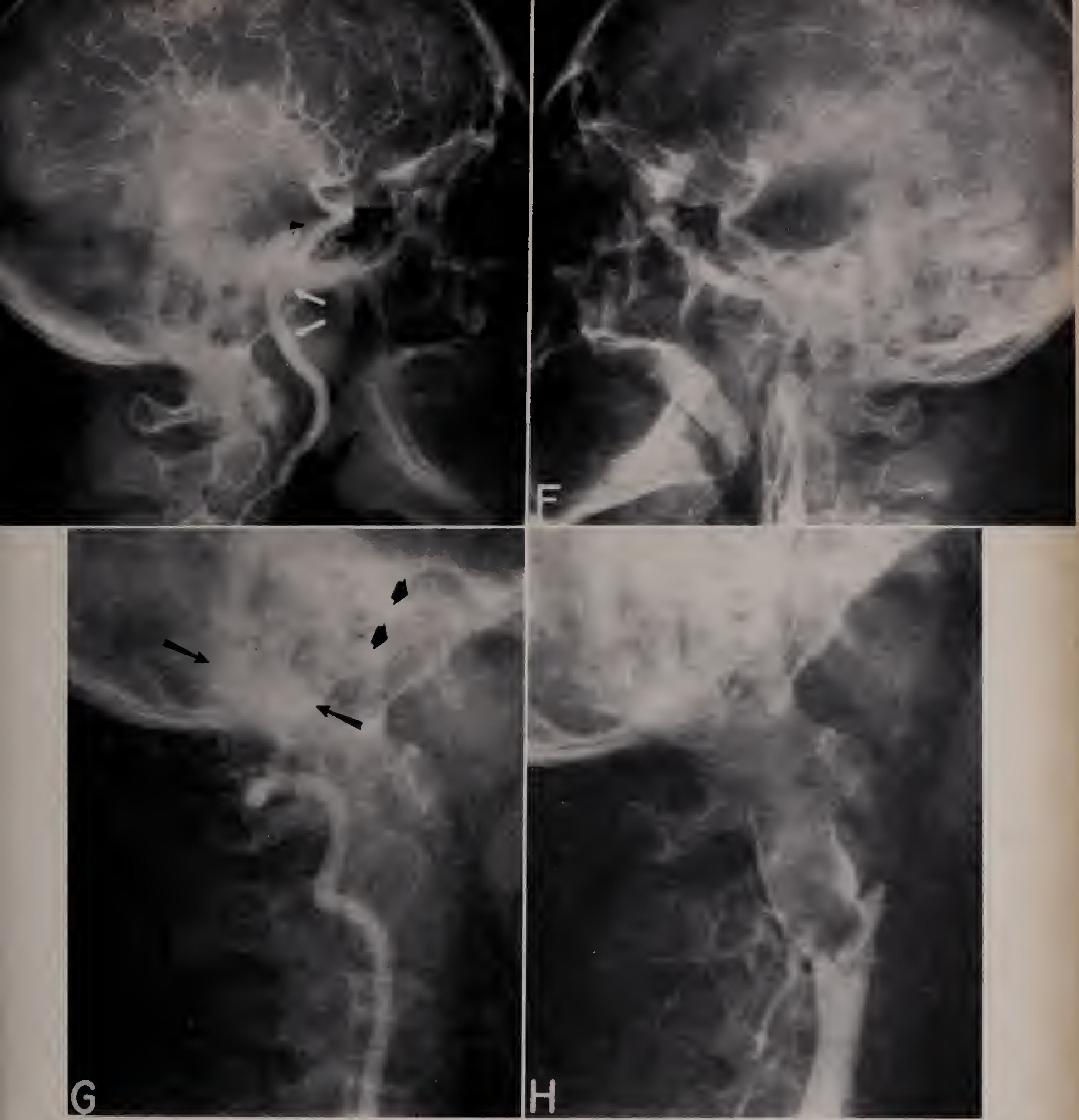


Fig. E. Right internal carotid artery. Deformity of cervical and intracanalicular components of the artery (white arrows). Compare with configuration in Figure F. Hypertrophied meningeal branches arise just below the siphon (black arrows). **Fig. F.** Left common carotid artery. Carotid siphon opened suggesting tumor in medial left middle fossa. Compare with siphon in Figure E. **Fig. G.** Right vertebral artery. Enlarged branches at foramen magnum transmit contrast substance to adjacent tumor, seen as tumor blush (long arrows). Compare with same area in Figure H. The blush was better seen in Towne projection (not shown). Basilar artery compressed against clivus by tumor (short arrows). **Fig. H.** Right internal jugular vein. Intraluminal mass causing obstruction to retrograde flow at level C1.

retropharyngeal mass can be seen in the lateral projection.

The ascending trunk of the right external carotid artery (Figure D) above the occipital branch orifice does not supply the posterior fossa tumor but one branch of the internal maxillary artery transmits contrast substance to a small nest of tumor vessels in the upper part of the retropharyngeal mass.

The course of the right internal carotid artery (Figure E) in the neck is distorted by the retropharyngeal tumor. (Compare with Figure F.) Note that the displacement also involves that part of the artery which normally traverses the carotid canal. Though not shown, contrast substance was faintly seen in some of the anomalous intracranial veins which were better demonstrated in Figure B. Enlarged meningeal branches are noted to originate from the artery just below the siphon. Incidentally, the stricture above the catheter tip is due to arterial spasm.

The left common carotid angiogram (Figure F) shows opening of the siphon which suggests medially situated left middle fossa tumor elevating the middle cerebral artery. There were no tumor vessels demonstrated in this area. The curve of the pericallosal artery is widened, indicating ventricular dilatation.

The right vertebral artery transmits some contrast substance to the posterior fossa tumor through enlarged branches seen in Figure G. Contrast substance is seen as tumor blush at the posterior margin of the foramen magnum. (Compare with this area as seen in Figure H.) It was better demonstrated in the Towne projection (not shown). The basilar artery is compressed against the clivus.

Venography. Examination of the right internal jugular vein by retrograde injection through catheter from the right femoral vein shows an intraluminal mass which obstructs retrograde flow above the level of C 1 (Figure H). Oxygen saturation below the obstruction was 95 per cent (normal = 70-75 per cent) and the recorded pulse pressure was arterial in character, indicating the magnitude of the arteriovenous shunt.

Ventriculography. Because of increased intracranial pressure, a ventriculo-atrial shunt was performed, preceded by ventriculography. This showed compression of the aqueduct and fourth ventricle associated with obstructive hydrocephalus.

Biopsy. Specimen was taken from the mass in the external auditory canal for biopsy. Impression was that of vascular neoplasm consistent with plexiform angioma.

Disposition. Surgery could not be considered because of the extent of this highly vascular, infiltrative, benign lesion. Accordingly, the patient was discharged to a nursing home.

discussion

This case amply serves to demonstrate the potential of femoro-cerebral catheter technique in the detailed angiographic analysis of lesions in the head and neck. No other method could provide such detail with such facility. There are many instances in which such a thorough study is not warranted. In these, the femoro-cerebral method still offers the patient a procedure with relatively little discomfort.

In some institutions it is customary to perform cerebral angiography under general anesthesia. We consider this an unnecessary, added hazard in most instances. In the illustrative case, the patient was given 100 mg secobarbital intramuscularly, on call to the Radiology Department. Though he seemed somewhat petulant during his hospital stay, he offered no complaint during angiography except that of backache from lying on a hard table for about two hours.

We believe that femoro-cerebral angiography is generally safer than the standard percutaneous, non-catheter method. This applies especially when multiple arteries are studied. It is also particularly true when dealing with patients suspected of having cerebro-vascular insufficiency. In these instances, iatrogenic occlusion due to intramural injection of contrast substance can be disastrous if the other cerebral arteries are incapable of sustaining adequate blood supply to the head. In these instances, furthermore, the arteries should be angiographically surveyed from their origin upward rather than from an arbitrary point of injection halfway between the head and the aortic arch.

In patients presenting with signs and symptoms suggesting cerebro-vascular insufficiency, we often find that an aortic arch injection is insufficient and that selective studies of the intracranial branches are necessary before the patient can be given a "clean bill of health." Using a femoral catheter, it is relatively easy to plan one's diagnostic program and then, as the study progresses, to modify that program should angiographic findings so dictate. Such flexibility is not provided by catheterization of any other artery and it is certainly not provided by non-catheter methods.

If the patient's condition permits, femoro-cerebral angiography may be done on an out-patient basis. The out-patient must be accompanied by a responsible adult. He is given premedication upon arrival and test films for radiographic technique are taken before angiography. After the procedure, pressure dressing is applied to the puncture site. He is kept under observation for bleeding for two hours and then instructed to go directly home and to bed with bathroom privileges until the next morning, when he returns for discharge examination.

conclusions

Using a relatively new catheter with added preformed curves specific for the angiographic study of cerebral arteries, we have simplified femoro-cerebral catheter angiography.

In most instances, femoro-cerebral angiography provides comparable or better vascular filling than direct percutaneous methods.

In most instances, femoro-cerebral technique offers the best chance for the most information with the least effort. This is particularly true of difficult diagnostic problems demanding maximum flexibility of operation during angiography.

We believe that femoro-cerebral technique is safer than direct percutaneous injection, particularly in multiple-artery studies and especially in patients suspected of having cerebrovascular insufficiency.

Femoro-cerebral technique assures less patient discomfort and generally obviates the necessity of heavy premedication or general anesthesia.

If the patient's condition permits, femoro-cerebral angiography may be performed on an out-patient basis. ■

3181 S.W. Sam Jackson Park Road (97201)
(Dr. Hinck)

abstracto

Una via transfemoral usando un cáteter coronario con curvas adicionales preformadas, permite la cateterización selectiva de vasos cerebrales. El llenado que se obtiene ofrece angiogramas excelentes. El método ofrece seguridad, incomodidad mínima al paciente y la mayor información por el menor esfuerzo.

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CHANGES REQUIRE TESTING

> *Many of us believe that the imposition of untried theories and untested procedures on a dynamic society is perilous and that changes in such an organism should be revolutionary, on the premise that running a jet aircraft into a stone wall is not the best way to stop it!*
>
> **Ben Moreell, in The Freeman, July 1967**

Human Renal Homotransplantation

Part III, Immunosuppression

RUSSELL K. LAWSON, M.D./DIETER KIRCHHEIM, M.D./LELLAND R. ELLIS, M.D.
CLARENCE V. HODGES. M.D., Portland, Oregon

Most important hazard to the renal homograft is the immunologic rejection which usually begins less than 30 days after completion of the transplant. Treatment is most effective if instituted during the incipient phase. It is directed toward destruction or inhibition of lymphocytes. Azathioprine is the drug currently preferred but radiation, antibiotics, splenectomy, thymectomy and steroids have been used. Experimental production of antilymphocyte serum holds promise of a more useful and less toxic method for the near future.

It is the purpose of this paper to consider briefly the various modes of immunosuppressive treatment for protecting renal homografts and the application of these techniques to the patient with a transplant.

Before discussing the types, modes of action, and toxicity of various immunosuppressive regimens, an outline of the usual clinical course of a patient receiving a renal homograft is in order.

usual course after transplant from living donor

Following revascularization of the transplanted kidney, brisk diuresis frequently ensues. Diuresis begins approximately 30 minutes after revascularization of the kidney, and ends 24 to 36 hours after transplantation. With diuresis there is rapid fall in BUN and rise in creatinine clearance.

Starzl has shown that ischemic time for the homograft directly affects early graft function.[1] He concluded from his data that it is desirable to hold ischemic interval to 40 minutes or less, and that in general the shorter the time, the greater the creatinine clearance at 24 hours post-transplant. The immediate post-transplant period is characterized by excellent renal function, but in 80 to 90 per cent of homografted patients a rejection crisis occurs within the first 30 days (average time, 13 days).

The rejection reaction can be divided into an incipient phase, during which the usual parameters of renal function are unchanged, and an active phase which is characterized by rapid deterioration of renal function. Numerous investigations have been conducted in an effort to find ways of detecting the incipient phase of rejection. Rejection reactions treated during this phase are much more easily controlled by increasing the immunosuppresive treatment. Earliest indication of impending rejection has been shown, in canine renal homografts, to be a decrease in cortical blood flow.[2] When total renal blood flow decreases, the rejection process is well underway. No methods are yet available for measuring changes in compartmental flow in the patient with a renal homograft. Several methods have been developed for estimating total blood flow and glomerular filtration rate in the homografted patient.[3,4] These techniques probably represent the best current methods for early detection of a rejection crisis.

Table 1
Features of an acute rejection crisis

1. Elevation of BUN
2. Fever
3. Swelling and tenderness of the graft
4. Decreased urine volume
5. Decreased creatinine clearance
6. Decreased urine Na
7. Proteinuria
8. Increased number of mononuclear cells in urine sediment
9. Hypertension

Clinical features of an acute rejection crisis are listed in Table 1. The most reliable of these signs are: Elevation of BUN, swelling and tenderness of the graft, and elevation of temperature.

An acute rejection crises is usually reversible if therapy is begun before the rejection process is well established. If a rejection crisis is reversed in an early stage, renal function will usually return to normal. The frequency and severity of

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Part IV, the concluding article in this series, will be published in the October issue.

acute rejection crises decrease with prolonged graft survival. Renal homografts that function beyond six months to one year appear to undergo an adaptation or are protected by a tolerant state in the patient. This adaptation allows a decrease in immunosuppressive treatment without the appearance of a rejection crisis. The management of the transplanted patient is easier and the outlook for continued graft survival and general prognosis is greatly improved in those individuals in whom a graft survives beyond one year. Starzl reported the long-term follow up on his first series of 64 patients with renal homografts.[5] Thirty-seven patients (57.8 per cent) survived one year. Of these 37 patients, only one died after surviving one year.

cadaver kidney difference

With one major exception, the above description of the clinical course of a patient with a renal homograft from a live donor is also applicable to the patient who receives a kidney from a cadaver donor. The renal homograft obtained from a cadaver donor is often severely damaged by prolonged ischemia and fails to function for periods as long as three to four weeks post-transplant. During the period of anuria or severe oliguria, the patient must be maintained on chronic dialysis. A rejection crisis in these patients is particularly difficult to detect because of the absence of the usual changes in renal function associated with the rejection process.

TYPES OF IMMUNOSUPPRESSIVE TREATMENT

Table 2

Types of immunosuppressive treatment

1. Radiation
2. Antimetabolites
3. Antibiotics
4. Steroids
5. Splenectomy and thymectomy
6. Experimental

radiation

First attempts to modify the immune response in humans following renal homografting were with total body irradiation.[6] These early investigations were conducted with radiation to levels as high as 700 r. With several notable exceptions, the use of total body irradiation was unsuccessful because doses sufficient to produce immunosuppression were frequently lethal.

Radiation is currently used as an adjunctive measure in immunosuppressive treatment. Hume and his co-workers recommend the use of local irradiation of the graft with 150 r on the first, third, fifth, and seventh days after transplantation.[7] In addition, single doses of 150 r to the graft may be given during a rejection crisis.

A theoretical basis for the use of local graft irradiation is to injure the radio-sensitive lymphocytes as they enter the graft to initiate the immune response. There are no apparent side effects with this treatment.

Several techniques have recently been reported for extracorporeal irradiation of the blood as a means of immunosuppression. Hume has used a strontium-90 source surrounding an AV shunt which connects a standard set of dialysis cannulas.[8] The immunosuppression is thought to be achieved by damaging or destroying lymphocytes.

antimetabolites

First report of successful prolongation of homograft survival using an antimetabolite as an immunosuppressive agent was by Schwartz and Dameshek.[9] These investigators showed that rabbit skin homograft survival time could be tripled by the administration of 6-mercaptopurine. Calne showed that 6-MP would also prolong the survival of canine renal homografts.[10]

A derivative of 6-MP, azathioprine (Imuran), was developed by Hitchings and his associates at the Burroughs Wellcome Company and was shown to be superior to 6-MP as an immunosuppressive agent.[11] Azathioprine is now the mainstay of most immunosuppressive regimens for human renal homotransplantation. Azathioprine is structurally closely related to adenine and its mode of action is thought to be competition with adenine and hypoxanthine for their enzyme receptors in nucleic acid synthesis.

Lymphoid tissues of the body respond to antigenic stimulus by rapid proliferation of lymphocytes. This active proliferation provides opportunity for the selective effect of azathioprine on the immune mechanism by inhibiting the formation of immunologically competent cells. As previously mentioned, a specific state of tolerance for the renal homograft gradually appears in many transplanted patients and the dose of azathioprine can be reduced without the appearance of rejection.

Azathioprine is well tolerated by patients at maintenance dose levels (1.2 mg/kg/day). However, when the dose is increased in an effort to reverse a rejection crisis, severe and even fatal bone marrow depression may occur. Other, less common, side effects of azathioprine are nausea, vomiting, diarrhea, anorexia, and possible hepatic damage.

In living donor transplants, the drug is begun two to three days prior to transplantation in doses of 200 to 300 mg per day. During the first few weeks post-transplant, the patient is maintained on the highest possible dose that does not produce bone marrow suppression. Following stabilization of renal function, the dose of azathioprine is gradually reduced to maintenance levels (usually 50 to 100 mg per day).

In cadaver donor transplants, azathioprine is given in very small doses (25 to 50 mg per day) during the period of acute tubular necrosis when renal function is very poor or absent. Moderately high doses of steroids are relied upon for immunosuppression during this period. This change in drug therapy is necessary because of the greatly increased risk of severe bone marrow depression in oliguric or anuric patients receiving azathioprine.

It should be noted that the effectiveness of azathioprine as an immunosuppressive agent has no relationship to the white blood cell count. Careful monitoring of the WBC serves only as a guide to administration of the maximum tolerated dose of the drug. Effect of azathioprine on the bone marrow is not apparent until four to five days after administration of the drug. This means that bone marrow depression due to the drug can begin several days before a fall in white blood cell count is seen. However, this problem is not unique and is frequently faced by the physician using chemotherapeutic agents in treatment of cancer.

An additional problem encountered with the use of azathioprine is an apparent increased sensitivity of bone marrow during an acute rejection crisis. At a time when it would seem most desirable to increase the dose of azathioprine, the patient is most susceptable to its most dangerous side effect. Some transplantation groups feel that the dose should be decreased or the drug actually discontinued during an acute rejection episode.

If a severe WBC depression does occur, the patient is immediately placed in protective isolation. In addition, appropriate antibiotics are administered, and gamma globulin injections are given if the serum gamma globulin level falls below 300 mg per 100 ml.

The effect of azathioprine on human reproduction has not been fully assessed. This agent has been shown to have a teratogenic effect in experimental animals and, although several apparently normal children have been born to patients on drug therapy, this important point should be remembered in the rehabilitation of renal transplant patients.

antibiotics

The only antibiotic with established efficacy in immunosuppressive treatment is actinomycin-C. This drug is used at the time of a rejection crisis as adjunctive treatment for reversal of the rejection process. It acts by preventing formation of messenger RNA from DNA and is, therefore, theoretically able to block formation of globulins in immunologically competent cells. This drug when used alone has little or no affect on homograft survival. But, when used in combination with azathioprine and steroids, it appears to have substantial effect in helping to reverse an established rejection process. The drug is administered intravenously at a dose of 4 to 8 mcg per kg per day every four days for a total of three to four doses.

The most important side effect from the use of actinomycin-C is bone marrow depression. However, the drug usually exhibits little or no toxicity when used in the homografted patient.

steroids

Use of steroids for immunosuppressive treatment was first shown to be useful by Goodwin.[12] Prednisone has now become the second most important drug in protecting human renal homografts from immunologic attack.

Mechanism of action of prednisone in preventing graft rejection is unknown. Destruction of lymphocytes, stabilization of cell membranes or lysosomal membranes, and stimulation of a general anti-inflammatory response have all been suggested as possible modes of action of this group of drugs.

The dose and timing of administration of prednisone in the renal transplant patient is highly variable as used in the various transplant centers. Some groups suggest pre-treatment with prednisone, while some suggest starting prednisone in high doses at the time of transplantation, followed by gradual tapering of the dose to maintenance levels. Still other groups suggest using steroids only at the time of threatened or frank rejection crises. However, nearly all of the transplant groups suggest prompt, marked increase in prednisone therapy during a rejection crisis. Our group begins prednisone on the day of transplantation in doses of 150 to 200 mg per day. This dose is gradually decreased during the first post-transplant month to levels of 30 to 40 mg per day. If an acute rejection crisis supervenes, the dose of prednisone is increased to levels as high as 500 mg per day for several days, and then is quickly dropped to the 100 mg per day range. When the rejection crisis has subsided, the drug is gradually tapered to maintenance levels. The eventual aim is to reduce the dose of prednisone to below 20 mg per day for long-term therapy.

The side effects of prednisone therapy are numerous and often of a grave nature. The most important single side effect is the masking of infectious processes. During the early post-transplant period, the patient is receiving intensive immunosuppressive therapy with azathioprine which renders him more susceptable to infections of all types. The addition of relatively high doses of prednisone greatly increases the problem of discovering and treating infections. Pneumonia, superficial wound infections, and similar processes become major, life-threatening problems in such patients.

Another important side effect of prednisone therapy is the continued possibility of acute gastrointestinal hemorrhage, particularly during administration of high doses of the drug. A majority of patients on high doses of steroids have guiac positive stools. The judicious use of bland foods and antacid therapy during the greatest risk periods helps reduce the incidence of massive gastrointestinal bleeding.

Steroid diabetes can occur in the renal transplant patient, and when severe may require treatment with insulin. Other side effects of prednisone therapy include hypertension, osteoporosis, cessation of growth in children, acne, and moon face

splenectomy and thymectomy

The lymphocyte is thought to be the mediator of the rejection process and there is a theoretical advantage to removing the spleen and thymus in an effort to eliminate lymphocyte producing and lymphocyte storing tissue. The effect of these procedures in human renal transplantation has been studied extensively by Starzl.[1,5] Effectiveness of these measures in helping prevent graft rejection has not been established.

experimental methods of immunosuppression

Recognition of the important role played by the lymphocyte in graft rejection has lead to various methods for inactivating or destroying lymphocytes. As mentioned previously, extracorporeal irradiation of the blood is an example of a lymphocyte ablation technique. Another technique designed to deplete the homografted recipient of lymphocytes is thoracic duct cannulation. This procedure has recently been used by Murray and his co-workers and consists of drainage of thoracic duct lympth, removal of lymphocytes from the lymph, and reinfusion of the lymph into the vascular system.[13] Murray has reported a decrease in the number and severity of rejection crises in patients treated by this method.

The most promising of the experimental technique now being investigated is the use of antilymphocyte serum as an immunosuppressive agent. This material is prepared by injecting lymphocytes into rabbits or horses. The serum is then harvested and purified by extracting the active globulin fraction. Our group has recently completed a series of renal transplant experiments in dogs, using antilymphocyte serum as the sole means of immunosuppression.[14] The results of this work are very encouraging. Antilymphocyte serum has proven to be an effective immunosuppressive agent for prolonging canine renal homograft function and appears to have little or no toxicity in experimental animals. We are currently engaged in the production of a human antilymphocyte serum which hopefully will be as effective as the canine antilymphocyte serum in preventing renal homograft rejection. ■

3181 S W Sam Jackson Park Road (97201)

References on next page

abstracto

El riesgo más importante del homotransplante renal es el rechazo inmunológico, que suele comenzar antes de los 30 días de la implantación del injerto.

El tratamiento es más efectivo si, instituido en fase incipiente, es dirigido hacia la destrucción o inhibición de linfocitos. El medicamento preferido corrientemente es la Azatioprina, pero se han usado asimismo la radiación, antibióticos, esplenectomía y timectomía, y los esteroides.

La produccion experimental de suero antilinfocitario, promete para un proximo futuro un método más útil y menos toxico.

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IMPROVEMENT IS INDIVIDUAL

Since we were conceived as a nation of sovereign individuals, it is clear that we can improve our social structure only as the individuals who comprise it improve themselves. Any attempt to improve society by imposing improvement on individuals using the coercive power of government is futile! The use of coercion to effect an alleged good destroys individual freedom of choice and erodes moral responsibility. It follows that the development by the individual himself of those positive personal traits which contribute to a good society will result in a maximum furtherance of the higher ends of life, i.e., scholarship, art, music, charity, and worship.

Ben Moreell, in The Freeman, July 1967

X-Ray of the Month

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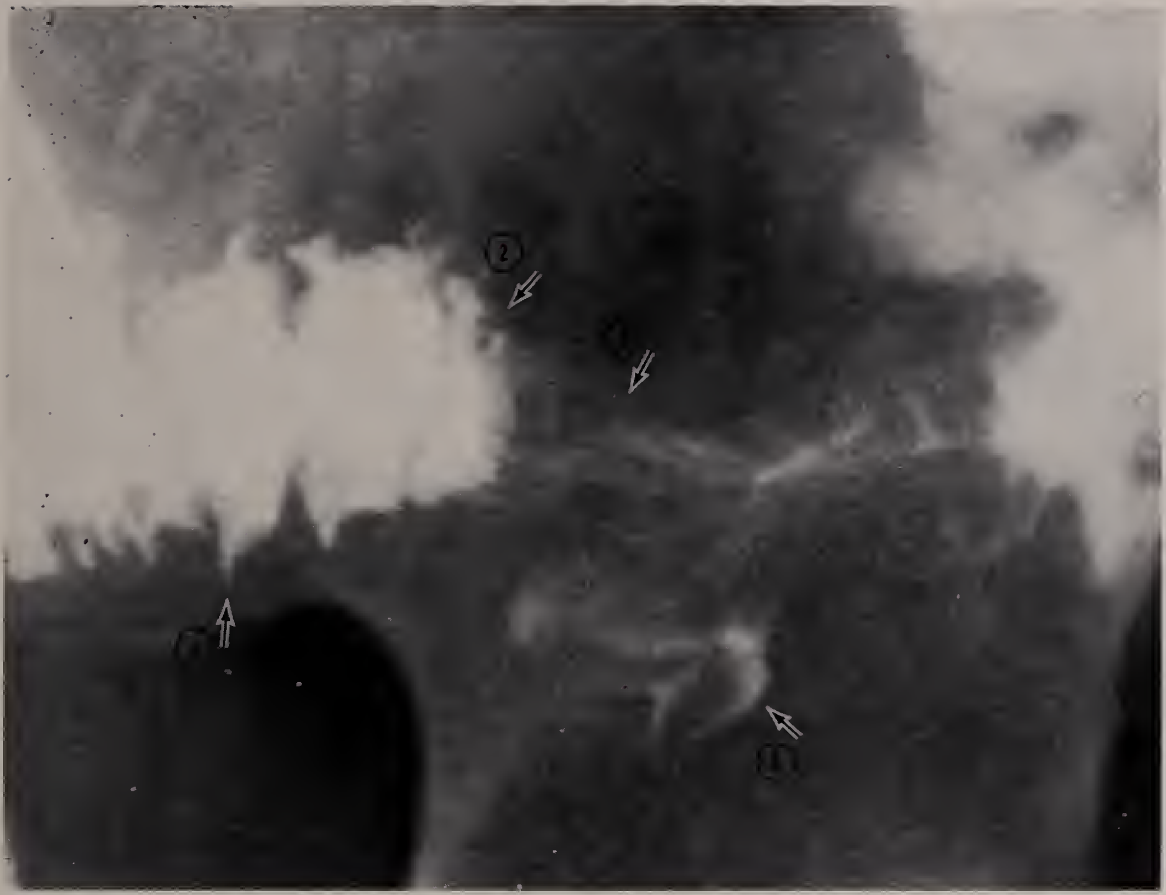

A 56-year-old male was admitted with signs and symptoms typical of obstruction of the colon. The above is reproduction of a spot film at the junction of the descending and sigmoid colon. What is the diagnosis?

See page 772

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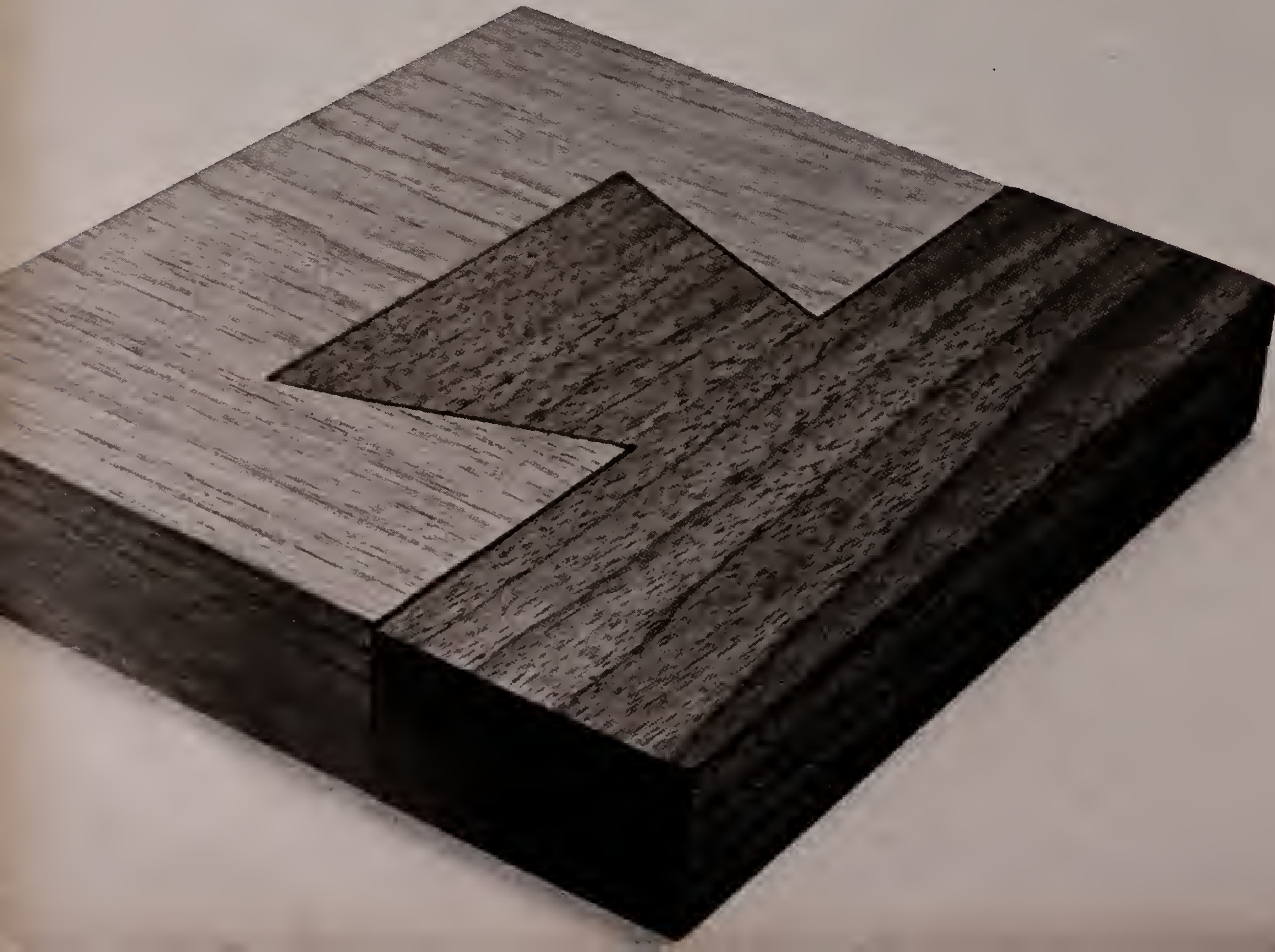

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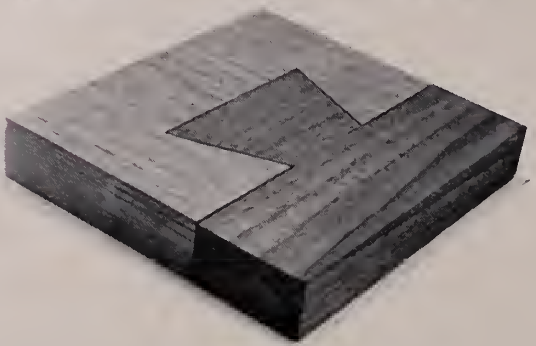

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Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg daily. When the drug is discontinued, depression usually disappears, but hospitalization and shock therapy are sometimes required.

Caution: Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to prevent or reverse hypotension and/or bradycardia.

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Use cautiously with digitalis, quinidine, or guanethidine. Not recommended for aortic insufficiency.

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Pay special attention to electrolyte balance of patients with severe renal or hepatic insufficiency. In patients with cirrhosis and ascites, watch for symptoms of impending hepatic coma. Thiazides may decrease glucose tolerance; use cautiously in diabetics. Hyperuricemia may occur but is readily reversed by a uricosuric agent. Lowering of blood pressure may sometimes result in nitrogen retention, particularly in patients with impaired renal function. Dosage titration is necessary in such patients.

Precautions: Watch for signs of fluid or electrolyte imbalance. Further electrolyte depletion may cause hypochloremic alkalosis and hypokalemia. Since the latter may precipitate digitalis intoxication, watch carefully patients who are taking digitalis or its glycosides or those with cardiac arrhythmias. In severe hypokalemia, large oral or intravenous doses of potassium may be required.

A few infants born of mothers who received thiazides during pregnancy have shown bone marrow depression with thrombocytopenia. Hydrochlorothiazide decreases responsiveness to exogenous norepinephrine and increases responsiveness to tubocurarine. Hypotensive episodes under anesthesia have been observed in some patients receiving thiazides.

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Annual Meeting, Sept. 19-23, Portland

Sommer Lecturers to Speak at Annual Meeting

PAUL S. RUSSELL, M.D.

JOHN P. MERRILL, M.D.

AXEL N. ARNESON, M.D.

Three internationally recognized speakers will be featured at the 93rd Annual Meeting of the Oregon Medical Association, September 19-22, 1967, Memorial Coliseum, Portland. Jogging, Renal Dialysis and a panel on Diuretics will be among the subjects of local papers to be presented.

The noted Sommer lecturers for 1967 include: John P. Merrill, M.D., Director Cardio-Renal Section, Peter Bent Brigham Hospital, Boston, Massachusetts; Paul S. Russell, M.D., Professor of Surgery, Harvard, Massachusetts General Hospital, Boston, Massachusetts; and Axel N. Arneson, M.D., Professor of Obstetrics and Gynecology, Washington University, St. Louis, Missouri. The Sommer Memorial Lecture Fund was established by the late Ernst August Sommer who left a perpetual endowment to bring outstanding medical speakers to Portland. From the time of the first lectures in 1931, to the current year's program, the series has been carefully planned by a committee of physicians. Arthur L. Rogers, Portland, currently serves as chairman. In keeping with Dr. Sommer's expressed wish, the visiting speakers are requested to lecture on problems arising in the general practice of medicine and surgery.

Each Sommer Memorial Speaker will present three papers. Dr. Merrill of Boston will present his first paper on "The Present Status of Renal Transplantation in Man." Other papers by Dr. Merrill include "The Treatment of Chronic Renal Failure" and "Advances in Our Knowledge of Glomerulonephritis."

Three papers entitled "The Mechanism of Tissue Rejection," "Nature's Management of Histocompatibility Differences," and "Clinical Transplantation and Some Thoughts For The Future" will be given by Dr. Russell of Boston.

Dr. Arneson of St. Louis will present the following "Special Interest Cases Among Patients with Cervical Cancer," "Double Primary Lesions in Cancer of The Cervix," and "The Evolution of Radium Dosimetry in Pelvic Cancer."

Hance Haney, Portland, OMA Vice-President and Chairman of the Annual Session, announces that Huldrick Kammer, Portland, is the Chairman of the Scientific Program.

continued on next page

"Doctor's Wife" in Spotlight

A flower blossomed into a share of the spotlight at sessions of the 116th AMA Convention in Atlantic City.

It was evident at functions of the Woman's Auxiliary, but came to full bloom during ceremonies at the Wednesday morning session of the House of Delegates.

On this occasion, Mrs. William Zartman, president of the Woman's Auxiliary to the Oregon Medical Association, pinned the flower to the lapel of Charles L. Hudson, immediate past-president of the AMA. It was a vivid salmon pink hybrid tea rose—a flower which not only has enhanced the beauty of Oregon but helped to brighten the lives of some handicapped children.

Officially registered with the American Rose Society as the "Doctor's Wife," the rose has played a prominent role in the Oregon Auxiliary activities. All funds from the sale of the flower go to provide playground equipment at non-tax-supported schools for handicapped children in Oregon. And the Oregon Auxiliary hopes to see "Doctor's Wife" roses growing in every state and contributing to similar programs.

The "Doctor's Wife" got its real beginning when Mrs. Howard Emmerson was Auxiliary president. "It was her custom to present a rose to visiting dignitaries." Robert Bissell, executive secretary of the OMA, said, "so I suggested that the Auxiliary try to develop its own rose."

Bissell put Mrs. Emmerson and Mrs. Zartman in touch with a horticulturist and, a short while later, the "Doctor's Wife" rose was born.

The "Doctor's Wife" rose goes national as the featured guest at the AMA Auxiliary Luncheon in Atlantic City. Representing the Oregon delegation are Mrs. Louis O. Machlan, Portland, Mrs. Huldrick Kammer, Portland, Mrs. William V. Zartman, Beaverton, and Mrs. William L. Lehman, Clackamas, with Mrs. Asher Yaguda (standing), retiring President of the AMA Auxiliary.

Today, the Oregon Auxiliary is nurturing several thousand "Doctor's Wife" rose bushes for fall shipment. Mrs. Huldrick Kammer, the project chairman, says the bushes grow to a height of 3 to 4 feet, sell for contributions of $5 each and may be ordered through the Auxiliary's Med-Aux-Park Inc., "Doctor's Wife," P. O. Box 8073, Portland, Ore. 97207.

Says Mrs. Kammer, "Every rose we sell will make the playtime of handicapped children rosier."

Charles L. Hudson, past president of the AMA, was presented a "Doctor's Wife" rose before the House of Delegates at the 116th AMA Convention in Atlantic City by Mrs. William V. Zartman, Beaverton, President of the Woman's Auxiliary to the Oregon Medical Association. Assisting Mrs. Zartman with the presentation of the rose is John E. Tysell, Eugene, OMA President.

Never underestimate the power of a Doctor's Wife . . . particularly the new rose which was developed for the Woman's Auxiliary to the Oregon Medical Association. Presenting "Doctor's Wife" embroidery Lapel roses at the Oklahoma State Medical Association's POW-WOW at the AMA Annual Convention, Atlantic City, are Mrs. William Lehman, President-elect of Oregon's Auxiliary, to Alvin J. Ingram, Memphis, Tennessee, member of AMA Board of Trustees; Mrs. Ingram is receiving her pin from Mrs. Huldrick Kammer, Portland, President of Med-Aux Park, Inc., Mrs. William V. Zartman, Oregon Auxiliary President, decorates the newly elected AMA Vice President, Malcom E. Phelps, El Reno, Oklahoma.

Oregon Regional Medical Program

Future planning was the main point of business at the recent meeting of the Oregon Regional Advisory Group for Heart, Cancer, Stroke and Related Diseases. Committee and officer assignments were also made.

Following the general intent of Public Law 89-239, the Oregon Region will in general cover all of the cities and communities, served by the health profession, within the State of Oregon. The fiscal agent for the Oregon Regional Medical Program will be the University of Oregon Medical School, and the planning grant activities, made possible by an official N.I.H. grant dated April 1, 1967, will be carried out at the University of Oregon Medical School. M. Roberts Grover, Jr., Director of Continuing Medical Education, will act as the program coordinator.

The Oregon Regional Advisory Group, designated to help participate in the planning grant activities by definition of Public Law 89-239, consists of the following individuals who have worked vigorously for the past several years to obtain for Oregon this Regional Medical Program, and to make available to the professions and the citizens of Oregon the advantages as defined by the original law.

Members of the Advisory Group are: Mr. David E. Abram, David W. E. Baird, John T. Brandenburg, Melvin W. Breese, Mr. James B. Castles, Ralph P. Christenson, Anthony J. Cortese, D.O., Miss Mary DeMartini, David DeWeese, Mr. George W. Dewey, Herman A. Dickel, Miss Daisy L. Ellman, Richard H. Ettinger, Mr. P. D. Fleissner, Mr. Karl Gehlert, Herbert Griswold, M. Roberts Grover, Jr., Mr. Gary D. Hansen, Charles H. Holman, Mr. Kenneth C. Hume, A. C. Hutchinson, Ernest T. Livingstone, Clarence A. Jenike, Matthew McKirdie, S. B. Osgood, Mr. M. R. Parelius, Mr. Chester Stocks, Franklin J. Underwood, Cecil Van Kleek, D.M.D., Mr. Edward J. Whelan, Vance E. Yung, Ph.D.

The following officers were elected for the coming year: Herman A. Dickel, Chairman; Alfred Hutchinson, Vice-Chairman; Mr. David Abram, Secretary-Treasurer.

It is hoped that all the allied health groups will be active under the intent of this program, and that all will soon be fully apprised of what and how they can relate to the activities of this program.

In the meantime, should there be any questions in regard to any matters relating to Oregon Regional Medical Program activities, they should be addressed to the Chairman, Herman A. Dickel, M.D., or to the Program Coordinator, M. Roberts Grover, Jr., M.D. The Oregon Regional Medical Program, University of Oregon Medical School, Portland, Oregon 97201.

continued on page 736

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Proceedings of the Board of Trustees

The regular monthly meeting of the Board of Trustees of the Oregon Medical Association was held on Saturday, May 20, 1967 at the Association headquarters in Portland.

President Tysell introduced guests in attendance and alternate trustees who were attending in place of duly elected trustees. He gave special introduction to Robert D. Wilson of Corvallis, alternate trustee for the Sixth Trustee District who had been newly elected along with Frank P. Girod of Lebanon as trustee.

Upon motion duly made, seconded and carried, the proceedings of the meeting of the Board of Trustees on Saturday, April 1, 1967, were approved as previously submitted to the members of the Board of Trustees in multilith form.

Upon motion duly made, seconded and carried, the monthly financial statement presented by the Secretary-Treasurer was accepted.

Highlighting the proceedings of Board were the following actions and reports:

- Special recognition of the "Doctor's Wife" rose
- Acknowledgement of OMPAC rating nationally
- Review of state legislative issues
- Status of the newly created statewide kidney program—Kidney Association of Oregon
- Action relative to P.L. 89-749
- Report of Committee on Public Relations

report of executive committee

President John E. Tysell, Chairman of the Executive Committee, reported that the Committee had met at 9:00 a.m. on this date to consider a number of matters relating to the business affairs of the Association and submitted the following recommendations which were adopted by the Board.

1. That the president-elect, Glenn M. Gordon, be authorized to attend the annual meeting of the Idaho Medical Association June 28-July 2, 1967, in Sun Valley, Idaho.
2. That the University of Oregon Medical School Alumni Association be invited to maintain a scientific booth at the Association's 1967 annual meeting and that the Executive Committee of the Board of Trustees make arrangements to meet with the Executive Committee of the University of Oregon Medical School Faculty.
3. That E. T. Livingstone be authorized to attend the June 7th meeting of the Oregon State Board of Health in Salem with A. C. Hutchinson and Noel B. Rawls as alternates.
4. That the following members of the Association residing in Multnomah County be submitted to Governor Tom McCall for appointment to the Oregon State Board of Health should a vacancy on that Board occur in the near future: Beatrice K. Rose, C. H. Hagmeier, Russel L. Baker, Philip A. Snedecor.
5. That the Association cooperate with the Health Manpower Project of the Oregon State Board of Health in the sponsorship of a statewide conference on Health Manpower.
6. That the Executive Committee of the Board of Trustees and the Executive Committee of the Board of Directors of Oregon Physicians' Service hold a meeting prior to the 1967 annual meeting.
7. That the Woman's Auxiliary be authorized to invite Gov. Ronald Reagan of California to be a guest speaker at its Thursday luncheon during its 1967 annual meeting and that Gov. Reagan also be invited to be the guest speaker at the Association's Awards Banquet that evening.
8. That Mrs. Huldrick (Maxine) Kammer's attendance at the 1967 annual meeting of the Woman's Auxiliary to the American Medical Association be considered a legitimate expense for promoting the "Doctor's Wife" rose to support Med-Aux Park projects.
9. That if Gov. Ronald Reagan of California is not available as a guest speaker for the Association's Awards Banquet during the annual meeting, Dr. Jernstadt, Professor of Speech at the University of Oregon, who has climbed Mt. Everest be guest speaker.
10. That Beatrice K. Rose of Portland be recommended to the State Alcohol Education Committee for appointment to its Advisory Committee.
11. That the recommendation of the Council on Medical Education that William D. Harrison of Beaverton be appointed to the Council to fill the vacancy created by the resignation of J. Scott Gardner be approved.
12. That the President after consultation with Louis J. Feves of Pendleton and the Chairman of OMPAC appoint a liaison committee to Representative Al Ullman of the Second Congressional District.
13. That the Association contribute $100 from its general funds to assist the Oregon Association of Medical Assistants in promoting the election of Mrs. Margaret Madill of Portland to the Board of Trustees of the American Association of Medical Assistants at the meeting of the National Association to be held in Los Angeles in October.
14. That the Board of Trustees dispense with its regular meeting during the months of June, July and August except upon the call of the president, and that the

> next regular meeting of the Board of Trustees be held on Saturday, September 9, 1967: and, further, that the Executive Committee be authorized to conduct the affairs of the Association during the interim.

"Doctor's Wife" rose gains recognition

Mrs. William V. Zartman, president of the Woman's Auxiliary reported that the "Doctor's Wife" rose had been featured in the May 1967 issue of *The MD's Wife* including a color print on the cover and a comprehensive story about the rose and the dedication of the first Med-Aux Park in Aloha, Oregon. Mrs. Zartman also reported that the May issue of *Northwest Medicine* featured the "Doctor' Wife" rose as would *The Oregonian* issue of Sunday, June 4, 1967. She also reported that Med-Aux Park No. 2 would be dedicated in Salem during the Auxiliary 1967 annual meeting. Mrs. William H. Lehman, president-elect of the Woman's Auxiliary, accompanied Mrs. Zartman to the meeting.

AMPAC rates OMPAC high

President Tysell introduced Blair J. Henningsgaard of Astoria as the newly elected chairman of The American Medical Political Action Committee as well as the senior delegate of the Association to the AMA. Dr. Henningsgaard congratulated the Oregon Medical Political Action Committee for its record of achievement for the current year as compared to other states. For example, he pointed out that OMPAC ranked fourth among all states in total contributions to AMPAC, first in ratio of members to potential membership, first in contribution per physician member.

review of house of delegates' action

Clinton S. McGill, Speaker of the House of Delegates, gave a brief summary of the action of the House of Delegates at its 1967 mid-year meeting held April 21-22 at the Village Green in Cottage Grove. Dr. McGill reported that the actions of the House of Delegates had been reported to component medical societies and committee chairmen with instructions to take appropriate action in accordance with the directives of the House of Delegates.

report on state legislative proposals

Donald F. Kelly, Chairman of the Committee on Public Policy, presented an oral report on the current status of legislative proposals regarding medicine and the public health now pending before the 1967 legislative assembly. The bills to which Dr. Kelly gave special emphasis were:

1. *Senate Bill 134*—establishing by law the "Statute of Limitations" as it applies to medical malpractice cases. This bill has passed both houses and is awaiting the Governor's signature.
2. *Senate Bill 159*—an Oregon " Good Samaritan" law which has been signed by the Governor.
3. *House Bill 1266*—combines the Oregon Medical Practice and Osteopathic Practice Acts and provides for the issuance of limited licenses under certain circumstances and for a limited period of time. This bill has passed the House of Representatives and is awaiting consideration by the Senate.
4. *H.B. 1461*—amends the Oregon Basic Science Act to provide that the State Board of Higher Education may accept Part I of the examination of the National Board of Medical Examiners in place of the Oregon basic science examination or similar examination in another state with which Oregon reciprocates with respect to the fundamental science certificate. This bill has passed both houses and has been signed by the Governor.
5. *H.B. 1757*—provides for the licensure of clinical laboratories; has been given a "do pass" by the House Committee on Public Health and Welfare and referred to the Ways and Means Committee.
6. *H.B. 1769*—is the Oregon Title XIX bill, has passed both houses but leaves much to be desired since the following provisions have been deleted: a. Assurance that the recipient may have free choice of physician and provider of service. b. That the State Public Welfare Commission "shall" be required to compensate physicians on the basis of reasonable fees based on "usual and customary" charges. c. The deletion of the section offering medical assistance to individuals and families suffering a catastrophic illness. d. The deletion of the provision providing for a special committee to study the Oregon Title XIX program during the next biennium and report to the Legislature.

Inasmuch as the report of the Committee on Public Policy was for information only no action was taken.

regional medical programs

Herman A. Dickel, Chairman pro tem of the Oregon Regional Advisory Group on Public Law 89-239 (Heart, Cancer and Stroke) presented an oral report in which he officially announced that Oregon's application for a grant under P.L. 89-239 had been approved and that he and M. Roberts Grover, Director of Continuing Medical Education at the University of Oregon Medical School, had made the trip to Washington, D.C. to receive instructions from the Regional Medical Programs Division of the U.S. Public Health Service. Dr. Dickel reviewed the present composition of the Oregon Regional Advisory group and announced that its organizational meeting will be held on Monday, June 12, at the Association headquarters office.

special committee on renal dialysis

Stanley A. Boyd, Chairman of the Special Committee on Renal Dialysis, presented a manuscript report of the Committee's meeting on Friday, May 5, 1967, which included a review of the Committee's recommendations adopted by the House of Delegates at its 1967 mid-year meeting held April 21-22 and then announced that agreement had been reached with the Columbia Region Artificial Kidney Center representatives that a statewide organization with the following basic elements would be acceptable:

1. A statewide organization carrying the name of The Kidney Association of Oregon structured on the existing Columbia Region Artificial Kidney Center.
2. A board of directors with statewide representation.
3. A headquarters office with executive director and necessary staff personnel.
4. A medical advisory committee functioning in the same capacity as a similar committee existing under CRAKC.
5. Sponsorship of a dual program as follows: a. A kidney transplant program at the University of Oregon Medical School. b. A home dialysis center at Good Samaritan Hospital in Portland with a full-time medical director and cooperative relationships with the Portland Veterans Administration Hospital.
6. The establishment of such satellite hemodialysis centers throughout the State as may be needed and as can be maintained.

Dr. Boyd also reviewed for the members of the Board of Trustees the more recent developments with respect to the establishment of the Kidney Association of Oregon.

Inasmuch as the report of the Special Committee on Renal Dialysis did not contain any recommendations upon motion duly made, seconded and carried, report was accepted for information.

committee on public relations

The report of the Committee on Public Relations was presented by Mr. Robert O. Bissell in the absence of the Committee Chairman, George R. Satterwhite. The report contained the following recommendations:

1. That in accordance with the action of the House of Delegates at its 1967 mid-year meeting, the following revised text of Resolution No. 14 introduced by the Multnomah County Medical Society be approved for introduction at the 1967 annual meeting of the House of Delegates of the AMA:

Subject: Medical Society Participation in Government Medical Care Programs

WHEREAS, public news media and communications from the American Medical Association indicate that medical societies are being urged to incorporate the practice of medicine to provide facilities and medical services in order to implement the requirements of programs such as that of the U. S. Office of Economic Opportunity; and,

WHEREAS, the indigent and medically-indigent have been—and will be—covered for health and medical care under other programs; and,

WHEREAS, organized medicine, through its individual members and its local, state and national organidations, has actively supported and cooperated in the implementation of many of these programs which would provide for the health care needs of the indigent and medically-indigent; now,

THEREFORE BE IT RESOLVED, that the American Medical Association discourage the use of federal funds by component or constituent medical societies in administration of programs such as those of the U.S. Office of Economic Opportunity.

2. That Article 16 of the "Recommended Guide for Giving Information to News Media" of the Oregon Association of Hospitals which reads:

16 *Deaths:* "Death of a patient is presumed to be a matter of public record and may be released by the hospital if the next of kin has been notified," be amended to read: "16. *Deaths:* Death of a patient is presumed to be a matter of public record and may be released by the hospital. Effort should be made to notify next of kin prior to or simultaneously with publication or broadcast of such item. If such contact has not been made, the media shall wait a reasonable time before releasing the news."

3. That the Association reaffirm its support of and that the county societies be encouraged to participate in the following public relations projects: a. Doctor-citizen of the Year, b. Press awards competition, c. Press workshops.

4. That Miss Helen Platt of KGW-TV be acknowledged by the Association at the most appropriate time for her longtime contribution to the dissemination of constructive medical information through her work on the OMA sponsored television program "To Your Health."

5. That this Committee accept the invitation to meet with the Public Relations Committee of the Oregon Veterinary Medical Association to discuss subjects of mutual interest and concern.

6. That this Committee develop a proposal to update, and reprint the manual, "Health Careers" originally developed by the Oregon Health Careers Council.

With respect to the first recommendation of the Committee on Public Relations the Board of Trustees voted to adopt two amendments as follows:

1. That the first "Resolved of the original Resolution No. 14 presented to the House of Delegates be inserted immediately following the third "Whereas" of the Resolution recommended by the Committee on Public Relations. The first "Resolved" of the original resolution read:

"WHEREAS, county and other component medical societies are voluntary associations of physicians in private practice, and are technically "business leagues";

and,"

2. That the final paragraph of the resolution as recommended by the Committee on Public Relations be amended by substituting the words "not encourage" for the word "discouraged".

Then, upon motion duly made, seconded and carried, it was voted that Resolution 14 introduced at the 1967 mid-year meeting of the House of Delegates as revised by the Committee on Public Relations and as amended by the Board of Trustees at this meeting be adopted for introduction at the 1967 annual meeting of the House of Delegates of the AMA in Atlantic City.

Following an extended period of discussion, upon motion duly made, seconded and carried, recommendation No. 2 of the Committee on Public Relations was referred to the Committee for further study and subsequent recommendation.

Upon motion duly made, seconded and carried, recommendations No. 3, 4, 5 and 6 contained in the Report of the Committee on Public Relations were adopted.

committee on mental health

E. I. Silk, Vice Chairman of the Committee on Mental Health, presented an oral report of the Committee's meeting on May 19. Dr. Silk related that Kenneth D. Gaver, Medical Director of the State Mental Health Division, attended the meeting and reviewed the State's mental health program and outlined the problems connected with it. Dr. Silk advised the members of the Board of Trustees that the study of the State's mental health program would continue at subsequent meetings from which specific recommendations would evolve as well as the possibility of an Oregon mental health conference being proposed.

There being no specific recommendations in the report, it was accepted for information of the Board.

special committee on public law 89-749

J. Richard Raines, Chairman of the Special Committee on Public Law 89-749 reported that Gov. Tom McCall within the next month would announce the appointment of an 11-man Comprehensive Health Planning Agency for Oregon which would receive $75,000 from federal funds for a 12-months operational budget. Dr. Raines also reported that a large statewide health planning advisory council would also be named of which one-half, according to P.L. 89-749, would be composed of the consumers of health services.

The report of the Committee contained the following recommendation which was adopted.

> "That the Association recognize the great importance and need for comprehensive health planning in Oregon and the planning proposal as presently being considered by the Governor's Office and that the Association stand ready to offer assistance wherever possible."

It was also voted that the special Committee on Public Law 89-749 in consultation with President Tysell submit recommendations to Gov. McCall for his consideration in making appointments to the Comprehensive Health Planning Agency for Oregon.

current status of federal legislation

Ernest T. Livingstone, Member of the Council on Legislative Activities of the AMA and a delegate to the AMA from this Association, presented a comprehensive report on federal legislation related to medicine and the public health now pending before the 90th Congress. Dr. Livingstone gave special emphasis to the recent ruling of the Internal Revenue Service which would tax the income of non-profit associations from advertising and exhibits as a "business" income unrelated to the purpose of such associations. He stated that the AMA and a number of similar professional organizations would be catastrophically affected if the IRS rule is permitted to stand. Dr. Livingstone went on to say that three bills have been introduced into Congress which would clarify the Internal Revenue Code to provide that income, including subscription and advertising income, derived by tax exempt organization from the publication such as a trade or professional journal, would not be considered taxable unrelated business income if the publication is substantially related to the purpose and function of the tax exempt organization.

Dr. Livingstone continued his report by stressing the significance of H.R. 6418, sometimes referred to as the "Partnership for Health Amendments of 1967". This bill, he stated, extends for four years the Comprehensive Health Planning and Public Health Service Amendments of 1966 (P.L. 89-749), removes the limitations on appropriations and adds new provisions under which the Secretary of HEW could make grants to states and others for research and demonstrations to improve existing methods of organizing, delivering or financing health services. The bill also contains the primary provisions of the clinical laboratory improvement act of 1967 which would require the licensing of all clinical laboratories with the exception of those operated by physicians solely for the purpose of treating their own patients.

Dr. Livingstone concluded his report by calling attention to the fact that the House, Ways and Means Committee would renew its study of H.R. 5710, the Social Security Amendments of 1967, on Monday, May 22.

committee on federal medical services

G. Prentiss Lee. Chairman of the Committee on Federal Medical Service presented an oral report announcing that arrangements were being made through Oregon Physicians' Service to provide a medical review of all charges for services rendered to patients under the Military Dependents Medical Care program which was challenged by the Office of Dependents Medical Care as exceeding the "usual and customary" level and that the Committee was working toward the application of the "usual and customary" fee principle to the Home Town Medical Care Program for Veterans with Service-Connected Disabilities.

OBITUARIES

DR. WILLIAM ROSS EATON, *Oregon City, died May 26 at the age of 79. He was a 1916 graduate of the University of Michigan Medical School, Ann Arbor, Michigan, and was licensed to practice medicine in 1917. Dr. Eaton, who lived in Oregon City for 50 years, was retired from medical practice at the time of his death. Cause of death was coronary occlusion due to arteriosclerosis of the coronary artery and hypertensive cardio-vascular disease.*

DR. GEORGE L. HAGMAN, *Medford, died May 28. He was 81. Dr. Hagman was born in Kentucky and was graduated in 1914 from Stanford University School of Medicine, Palo Alto. He was a member of the American Board of Orthopaedic Surgery. He had lived in Medford for 6 years during which time he was retired. Cause of death was acute cardiac failure due to cardio-renal vascular disease and cerebral hemorrhage.*

DR. ALSTRUP NORDAHL JOHNSON, *66, Roseburg, Oregon, died May 1. Dr. Johnson was born in Montana and attended Loma Linda University School of Medicine, Loma Linda, Los Angeles, where he was graduated in 1935. He was certified by the National Board of Medical Examiners in 1935. Dr. Johnson was a veteran of World War II. Cause of death was carcinoma of the right kidney.*

DR. HUBERT FRANCIS LEONARD, *Portland, died May 19 at the age of 86. He was born in Illinois and graduated in 1913 from the University of Oregon Medical School, Portland. He was licensed in 1914 and practiced in Portland from that time. He was retired at the time of his death. Cause of death was terminal bronchopneumonia due to arteriosclerotic cardiovascular disease.*

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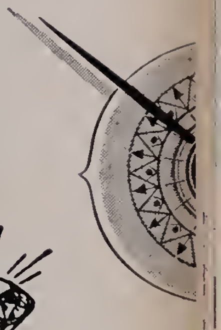

Idaho Medical Association —407 WEST BANNOCK ST., Boise, Idaho 83702

PRESIDENT *James R. Kircher, M.D., Burley*
SECRETARY *William R. Tregoning, M.D., Boise*
EXECUTIVE SECRETARY *Mr. Armand L. Bird, Boise*
Annual Meeting, June 26-29, 1968, Sun Valley

Diamond Days in the Gem State

Just to give added lustre to Idaho's Diamond Anniversary, the sun of Sun Valley, having been in hiding behind rain clouds for many days, came out just in time to add warmth to one of the most pleasant in the series called the most pleasant of all medical meetings. Days were perfect for whatever one does at Sun Valley and even the Trail Creek picnic area was warm long after the sun had dropped behind the now very green hills to the west. Weather matched the traditional warmth of Idaho's welcome, good fellowship, and goodwill.

In spite of Jim Kircher's nostalgic comment about meetings in the past having been more relaxed (see his President's Message elsewhere in this issue) the Idaho Formula, now happily restored, provides ample opportunity for relaxation. The Formula calls for lectures in the morning, sports, conversation, or just plain loafing in the afternoons. It would be quite impossible to prepare a better plan.

Record attendance was registered at scientific sessions as guest speakers, who were unanimous in their praise of the meeting, outdid themselves in their presentations.

The warm gratitude of the Association is extended to Richard A. Forney, Boise, Chairman, and his Program Committee for their efforts in putting together the excellent Diamond Anniversary session.

Milford O. Rouse, Dallas, new President of the American Medical Association paying his first visit to a state association, was the Featured Speaker, and Mrs. Karl F. Ritter, Lima, Ohio, new President of the Women's Auxiliary to the American Medical Association, was also a guest.

The social side of the program was not neglected. The weather cooperated in making outdoor events a delight — from recreation to the ever-popular Trail Creek Barbecue.

Turning in a fine performance as toastmaster for the annual banquet honoring outgoing President and Mrs. A. Curtis Jones, Jr., Boise, was Asael Tall, Rigby, a Past-President of the Association.

Education was not forgotten when the program was prepared for the meeting. Its quality was appropriate to the occasion. Walter P. Work, of Ann Arbor, a slow starter, soon demonstrated the extensive knowledge of neck masses and the careful organization of his presentations that have won the respect of those who know of his work. His discussion was well outlined and illustrated with a number of colored slides showing typical lesions. His discussion was entirely practical. His lectures on tumors of the major salivary glands and facial nerve palsies were equally interesting and practical, the latter justification enough for attending the meeting.

He was followed, the first morning, by William K. Hamilton who brought central venous monitoring into sensible perspective. Perhaps over-touted as an indicator of cardio-respiratory problems, it has considerable usefulness in spite of the fact that it does not always give all the information it is supposed to provide. Hamilton's warning on respiratory complications of postoperative and immobile patients should be posted in recovery and special treatment rooms in every hospital.

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continued from page 741

Eric M. Nanson, of Saskatoon, Saskatchewan, emphasized the importance of prompt recognition of death-dealing situations after chest injury, and the needless loss of life when such things as pneumothorax are not treated. Insertion of a chest tube is not difficult but it can save a life. Postphlebitic legs and varicose ulcers, common surgical problems, were discussed from an equally practical standpoint. Dr. Nanson's discussion of thyroid carcinoma was a refreshing application of common sense to an issue that has been controversial far too long.

Malcom B. Dockerty, of Rochester, Minnesota, discussed colonic polyps, ovarian cysts, and ovarian solid tumors. He is considerably more concerned about the malignant potential of polyps than some who pooh-pooh the idea that they can become dangerous. Dr. Dockerty has agreed to provide some material on this lecture for later publication in this journal. His investigation in this field has not yet been published. His work on ovarian cysts and tumors has, however, been published and widely recognized. His lectures were well organized and authoritative.

Oglesby Paul of Chicago, whose gentle dignity was somehow suggestive of a British background, gave excellent discussions of myocardopathies, cardiac arrhythmias and long-term observations of coronary heart disease. His viewpoint was entirely that of hospital practice and the cases he cited were those with serious problems. His suggestions on management were, therefore, significant and important. Abstracts of his lectures will be published later.

Standout conversation stimulator of the meeting was Kermit Krantz, of Kansas City, Kansas, who

would not let a little thing like his recent Bell's palsy interfere with his dynamic method of teaching. His experience in the famed circuit courses conducted by the University of Kansas was obvious in the organization of his material but could not explain the energy with which he investigated admission of fetal blood into material circulation, the machine he developed to prove his theories about the placenta, or the vigor with which he condemned manipulation to hasten its expulsion. Nor could field experience account for the bitterness with which he attacked the problems of illegitimacy and weddings in the "Winchester Cathedral." It was the latter lecture that stimulated thought and talk for the remainder of the meeting. His lecture on female incontinence was a course in anatomy of pelvic muwculature in the female.

President of the American Medical Association and two members of the AMA staff were special guest speakers. Edwin J. Holman, LL. B., Director of the Ethics Division of the AMA Law Department and Secretary of the Judicial Council, substituting for Mr. Hirsh, Director of the Law Department, discussed problems in ethics and public relations. He cited the facts that doctors are overworked and that their numbers are inadequate as the main reasons that doctors are frequently maligned. He told of one woman who favored socialization of medicine because it would "punish the doctors." Rising costs of insurance and reduction of benefits have brought complaints. He urged physicians to control those who charge excessive fees, warning that it is not enough to create grievance committees. He also suggested acceleration of programs to train assistants, to relieve some of the strains created by physician shortages.

Paul B. McCleave, LL. D., Director of the AMA Department of Medicine and Religion, presented a thoughtful discussion of current attitudes toward morals, hoping to call attention to problems rather than to offer solutions.

Milford Rouse had transportation difficulties in getting to his first appearance at a state meeting as AMA President. He had been installed in office only a week previously, at Atlantic City where he had distinguished himself by a dramatic appeal to the House of Delegates in 1955. He has been an able and popular speaker for several years and won highest recognition of AMA on the basis of his record.

From his address at Sun Valley, and a previous address at Multnomah County's meeting at Salishan Lodge earlier this year, his project for the year is very clear. He does not talk *at* an organization but speaks directly *to* the individual members. He is not trying to build organization from the top down but is appealing to physicians to make organization what it should be. He is very well aware of differences of opinion but asks members to keep differences within the organization while presenting to others the majority position as decided by democratic means. His plea extends to the establishment of better understanding with others in the health field to the end that differences be resolved by interprofessional communication and not be exposed before the public. He suggests that physicians take part in civic and political affairs. And in urging physicians to take part in county society and state association activities, he recognizes the advantage of county medical society influence on AMA policy rather than the all too frequently accepted reverse. His style is gentle and his manner mild but he is completely serious about bringing the American Medical Association back to the real source of its strength. After what has happened in recent years, this is a most refreshing attitude.

House of Delegates

Business of the House was handled firmly by President Jones and work was completed in good time. Pattern of previous years was followed, with introduction of reports and resolutions constituting the first portion of the meeting of the first day. Later the same day the reference committees held open hearings with full House membership participating in each session. Final reports of the reference committee were submitted after a 7:00 a.m. breakfast on the third day of the meeting.

Report of the President, A. Curtis Jones, was early on the agenda for the House at the first session, in the Lodge dining room, Wednesday, June 28. It was a comprehensive report, listing highlights of the year's activities and calling attention to several matters requiring delegate action.

He mentioned success in the 1966 elections with return of a United States Senator and Congressman, together with election of a new Representative. He urged participation in AMPAC and IMPAC.

By reading a letter from Willard R. Brown, of Denver, a Regional Program Director, Medical Care Administration, HEW, he illustrated the threat of bureaucratic control. Dr. Brown expects to reduce cost of the Medicare program by better organization of physicians' services. Although bureaucratic government is itself responsible for in-

creased costs, it expects physicians to reduce them.

Hospital costs are increasing and the day of the $50 hospital room has arrived in Idaho. With increasing demand for medical services, there is a chronic shortage of medical personnel. Medicare was thrust on an unwilling profession but physicians have been trying to make it work. Dr. Jones resents the implication that physicians are responsible for its growing cost while the reasons for the increase are built into the program itself.

incorporation

He considered the most important action of the year to have been incorporation of Idaho Medical Association and the adoption of new articles of incorporation, providing government of the organization through bylaws. The new bylaws include provisions of the previous constitution and bylaws.

A blanket accident policy now covers members while on Association business. It extends to delegates while attending any session of the House.

Purchase of property at 405-407 West Bannock Street, Boise, was completed and the Association offices are now in the building. A promissory note was signed by Dr. Jones and William R. Tregoning, Secretary-Treasurer, in the amount of $21,000 to pay for remodeling. The loan will be repaid over a period of 15 years. Purchase of adjacent property is contemplated.

He reported an unusual action in deactivating a resolution duly passed by the House at the 1966 session. This was done after a telephone survey of Councilors. The resolution called for efforts to restrict use of narcotics by podiatrists. They threatened legal action if the Association should continue to press for control.

Another problem required calling of a conference of presidents of component societies. This was the introduction of a bill in the State Legislature creating a commission to study problems associated with establishing a medical school in Idaho. A previous bill that would have established a school had been withdrawn earlier. After a four hour session, Dr. Jones called for a vote of those present. It was favorable. He then asked the Council for action and obtained approval based on the decision of the majority of component society presidents. The Association then supported the bill, which was passed. E. V. Simison of Pocatello and Birdsall N. Carle of Twin Falls, were named to the Commission by Governor Samuelson.

Dr. Jones reported that a total of 147 physicians had been active in Association affairs during the year.

dues increase

The House voted $25 increase of annual dues and a $100 special assessment to be paid over the next three years. Fund created by the special assessment is to be used for purchase of land adjacent to the present office building with any excess devoted to retiring the loan for remodeling the building.

Membership in the House will be increased by seating delegates from specialty sections and the office of Speaker of the House was created. Turned down, however, were a resolution calling for division of the state into seven councilor districts and a resolution calling for election of the nominating committee.

The WICHE Regional Medical Program Planning Staff has been asked to develop plans for training and utilizing rehabilitation personnel. The House directed that an Idaho Coordinating Committee on Laboratory Medicine be created and that it cooperate with the Idaho Hospital Association and the Society of Idaho Pathologists in studying the possibility of legislation on certification of laboratories. Report is to be submitted by January 1, 1968. Additional resolutions called for a committee of psychiatrists to study suicide among Indians, for the Officers and Councilors to conduct a survey of the membership on injuries caused by fireworks sold under the new definition of safe and sane materials, and for repeal of the indenture clause from Idaho law that deals with WICHE professional education. The latter action was result of adoption of a detailed report of the WICHE Student Exchange Program, presented by Martha Jones.

Report of the Industrial Medical Committee listed a number of meetings and attempts to have the Industrial Accident Board and the sureties adopt a relative value schedule. No schedule had been adopted at the time of the Sun Valley meeting but agreement is anticipated and the committee expects that a new schedule can be in effect by January 1, 1968. The report was accepted with commendation.

legislation

The State Legislative Committee reported actions of medical significance by the Legislature and reported gratitude of Legislators for the dispensary conducted by Frederick D. Koehne of Nampa.

An Idaho Commission for the Blind was established. A fund of $36,000 was appropriated for the Board of Medicine. The State Board of Health was authorized to specify conditions for transportation of dead bodies, prescription drugs were exempted from sales tax and containers of poison were required to carry description of the antidote on the label. Sum of $550,000 was appropriated for the Student Exchange Program. Funds were appropriated for mental health centers in Lewiston, Idaho Falls and Twin Falls. Two bills on child abuse failed and a laboratory licensing bill died in committee. A bill reorganizing the State Department of Health was passed but is not expected to alter present operation. A bill creating a State Board of Eugenics was passed but vetoed. Diagnostic and treatment centers for juveniles were not approved. A bill to license naturopaths was opposed by the Committee and was killed.

A comprehensive narcotics law, listing specific drugs, requiring an annual state license, and requiring prescriptions to be written in triplicate, was passed. Also under regulation are stimulants, hypnotics, halucinogens and similar drugs. The State Board of Pharmacy will enforce the measures and funds were appropriated for the purpose. Other bills passed concerned admission of optometrists to physician panels of medical service corporations, changes in the law on privileged communication, several measures on traffic, and examination of school personnel for tuberculosis.

Report from the James W. Perry Agency on the Group Accident Health-Catastrophic Policy was adopted and the House directed that members be urged to enroll.

James R. Kircher, of Burley was installed as President, O. D. Hoffman of Rexburg was named President-elect, and William R. Tregoning was re-elected Secretary-Treasurer. Alexander Barclay, Couer d'Alene and Donald K. Worden, Lewiston, were returned as delegate and alternate to AMA. Joseph B. Marcusen, Nampa, was elected to full term as Councilor for District 2 and John E. Comstock, Pocatello was elected for the unexpired term of O. D. Hoffman. Dauchy Migel, of Idaho Falls, was elected Speaker of the House. P. Blair Ellsworth of Idaho Falls and Willard Peterson of Twin Falls were elected to the Publication Committee, constituting nomination to the Board of Trustees of NORTHWEST MEDICINE.

Thanks to Hosts and Hostesses

The sincere appreciation of the Association is extended to those who served as Hosts and Hostesses for the Guest Speakers at the Annual Meeting. They were: Dr. and Mrs. John R. McMahon, Pocatello; Dr. and Mrs. A. Curtis Jones, Jr., Boise; Dr. and Mrs. Birdsall N. Carle, Twin Falls; Dr. and Mrs. Robert D. Jenkins, Boise; Dr. and Mrs. Wray Wilson, Coeur d'Alene; Dr. and Mrs. James H. Spafford, Twin Falls; Dr. and Mrs. James R. Kircher, Burley, and Dr. Frank W. Crowe, Boise.

New Pharmacy Rules

Idaho physicians and pharmacists are being advised to continue to prescribe and dispense narcotic drugs as usual until all practitioners have been licensed and physicians have received their triplicate prescription pads, according to C. E. Barnett, Executive Secretary of the Idaho State Board of Pharmacy. The Pharmacy Board, administering the program set up by Senate Bill 87, expects it will be at least 90 days before the program can be fully implemented.

The necessary forms could not be printed until funds became available on the effective date of the bill, July 1, 1967, Mr. Barnett said. The Board expects delivery of the forms in approximately 60 days, letters of instruction and application forms are being mailed to physicians.

It is believed that some physicians may not need a *state* narcotic license. Such a license is *not* required in prescribing in a hospital. If writing prescriptions for Class A narcotics, a new state license will be required.

Board of Medicine Section

The State Board of Medicine met in Boise July 10-12 and granted licensure to 30 physicians and two physical therapists.

Charles A. Terhune, Burley, was elected chairman and Charles E. Kerrick, Caldwell, Vice-Chairman. Other members of the Board are Orland B. Scott, Kellogg; James S. Newton, Lewiston; Robert E. Lloyd, Boise; and G. Curtis Waid, Idaho Falls.

Gift for Dr. Jones

Retiring President, A. Curtis Jones, receives gift of the Association from James R. Kircher, his successor.

Personals

A. Curtis Jones, Jr., Boise, was awarded custody of the "Crested Cuspidor" for the coming year by 1966 winner, Wallace H. Pierce, Lewiston, at the Association's Annual Meeting.

Announced as the newest members of the Association's "Fifty-Year Club" were C. A. Ronins, Lewiston, and Roscoe C. Ward, Boise. Appropriate certificates are now being printed.

Details of House of Delegates action will be carried in coming News Letters.

Officers of the Woman's Auxiliary to the Idaho Medical Association for the coming year will be:

Mrs. Dauchy Migel, Idaho Falls, President

Mrs. Willard M. Peterson, Twin Falls, President-Elect

Mrs. W. Wray Wilson, Coeur d'Alene, First Vice-President

Mrs. Carl B. Smithson, Boise, Second Vice-President

Mrs. Dennis L. Wight, Pocatello, Third Vice-President

Mrs. Ben E. Katz, Twin Falls, Fourth Vice-President

Mrs. George L. Voelz, Idaho Falls, Secretary

Mrs. Miles E. Thomas, Boise, Treasurer

Athletic winners at the 75th Diamond Anniversary Meeting were: Glenn A. Hoss, Twin Falls, Low Gross—Men's Golf; J. Wayne Tyler, Boise, Low Net—Men's Golf; Thomas E. Dillon, American Falls, Trap Shoot.

"COCA-COLA" AND "COKE" ARE REGISTERED TRADE-MARKS WHICH IDENTIFY ONLY THE PRODUCT OF THE COCA-COLA COMPANY.

President's Message

Dedication to Service

It is with sincere humility that I accept the position and responsibility of presidency of the Idaho Medical Association for the year that lies ahead.

Twenty years ago I attended my first Idaho meeting here at Sun Valley. At that time the atmosphere appeared to be very relaxed—and, although I am certain that matters of importance were under consideration, life, the practice of medicine, and the complexities of organized medicine were relatively simple in comparison to 1967's frustrations and dilemmas.

However, I am well aware that the validity of such a statement depends on when it is made and who is at the podium. With each succeeding year since I first became a member of the Program Committee ten years ago, I have observed a steadily increasing work load for the House of Delegates as well as for all committees—every member being concerned with the increasing areas in which we have responsibility.

It seems that life in these days requires us to learn to travel from one crisis to another, wondering at each step what lies ahead on an uncharted road. We are often beset by external pressures brought to bear by self appointed experts—experts who profess to know more about medicine and the patients' problems, than we do, who practice the profession and have a direct interest in the patients' difficulties.

During the 12 months since we last met, I have often felt grateful that Curtis Jones was holding office in this legislative year. I believed that my term would be less hectic.

Although no regular session of the legislature is scheduled for the coming year we cannot rest, because each year brings forth new and more complex problems. At this point we can all assure ourselves of a busy and interesting time in the future.

JAMES R. KIRCHER, M.D.

President Jones, although it will be difficult to follow in your wake, I shall endeavor to exhibit the dedication, the tact, the diplomacy, and the judgment you have so consistently shown during a year filled with many eventful moments, each requiring important decisions.

Your performance in office has been not just the exercise of your duties—which was expected—but beyond duty has been your unselfish and spontaneous dedication to the interests of our profession and to organized medicine.

I pledge to serve to the best of my ability, trusting in and fortified by a long held belief that in this profession, one should be willing to serve, and by so doing, enhance our primary task of service to all mankind.

In undertaking this position, I must have, and request, the help, advice and support of each member. Without this sustaining strength your officers alone will be ineffective in achieving the goals we are jointly striving for.

The response of members asked to serve on committees has been both gratifying and deeply appreciated.

I promise that our future efforts in organized medicine will not be in jousting windmills, but directed hopefully to the pursuit of answers to problems that are important to each of us—problems that merit and deserve the energy and time you will be asked to give.

I shall not dwell on the many problems of the Association with which you have either wrestled during the past sessions or which you know will require decisions in the future—such questions as raising additional money, whether through a dues increase or an assessment, possibly entering into a Keogh type retirement plan, whether to purchase property adjacent to our new, beautiful offices, and many others.

President Kircher's first address to the Idaho Medical Association's House of Delegates at the annual meeting in Sun Valley June 30, 1967.

We now have before us a proposal for the development of a medical school in Idaho, and we must consider this question from many different directions. Our organization, besides being intimately concerned with medical education, has the broadest background of information and experience in this field.

I hope that each of us will make available to the Governor's commission the benefits of our thinking. The commission's findings may have a far reaching effect on the affairs of this state.

Another subject in the health field meriting your attention is the preparation of a new health curriculum for Idaho schools from grades one to 12. Dauchy Migel of Idaho Falls, was asked by President Jones to be our official representative on this important project.

I should like to propose another educational type project for your consideration. I have thought about it for some time, and it just might turn into a good public relations program, that would not require any particular organization or committee.

I should like to see a program to encourage and enlist the interest of high school, or even younger students into the medical and allied health fields. Some of the hospitals around the state have done an excellent job with the so-called "Candy-Stripers."

Why don't we go to work and undertake a comparable program, only emphasizing the medical side of the story?

I am certain that each of us, if we should but take a moment or two, could encourage some of our young friends to become medical, dental or veterinary students; to enter into nursing or technical training courses; to consider becoming physical therapists, medical librarians, dental hygienists or even medical secretaries.

Student interest is there. Surveys consistently show that 20 to 25 per cent of high school and college students are interested in some of the health fields. Yet not enough are attracted.

This leads me to ask—and I am as guilty as the next—where have we fallen down in our responsibility to society in this area?

The first meaning of the word *doctor* is *teacher*. Have we forgotten this implied, if not expressed, charge conferred upon us with our degrees as doctors—are we, indeed, teachers?

Furthermore, if we had been more active in this area in the past, and if we would resolve to be more active in the future, would such activity and action not help resolve the manpower problem in medicine, both in Idaho and the nation?

While dwelling upon manpower, and I should include womanpower, problems, I should like to offer an observation I have made over a period of years. It arises from many different situations and many different programs, at local, state, and national levels.

Whether it is valid or not, and whether it is accepted or not, I offer it simply for your consideration.

In my opinion, part of the medical manpower problem exists today because there are far too many physicians engaged in unnecessary, repetitive, and unproductive research. Far too many are engaged in bureaucratic, administrative exercises. Far too many are involved in programs of ephemeral super-idealism not tempered with realistic and practical thinking.

In short, I am deeply concerned that more and more formerly practicing physicians are telling relatively fewer and fewer doctors engaged in taking care of the world's ills, how better to utilize their time, how to practice better medicine, and how to take care of more and more patients.

And this exists in light of the historical truth that the entire reason for our existence as doctors is to take unto ourselves the burdens of humanity's medical sufferings.

After this, no doubt I should return to specifics.

Before these remarks sound too much like criticism alone, I should like to commend the continuing expenditure of intelligence, energy, tangible assets, and devotion to responsibility by every doctor deserving of that title. Of particular note, mention should be made of those individuals who have left their practices here, in the Gem of the United States, and sacrificed to contribute their talents to the resolutions of the ills in less fortunate areas of the world. They have done this by accepting a tour of service in such programs as HOPE, the Volunteer Physicians for Viet Nam, and other humanitarian programs. I believe we should encourage our physicians to continue to participate in such worthy projects.

In delineating my thoughts at the time of assuming this office, it is difficult to assemble all the ideas, ambitions, and hopes into one speech. There is one area, however, that has become of increasing interest to me, and I believe should be for a great majority of us. This is the emerging area of proper care and attention in sports medicine. I suggest that physicians in each locality accept the responsibility for proper medical supervision of the screening, training, and care of athletes, particularly those in high school programs. A simple inquiry to the AMA will bring to anyone who asks, a wealth of material on any aspect of this subject. From personal experience, I can assure you that most coaches will welcome communication with any interested physician.

continued on page 754

"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"

The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

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Before proceeding to my last item of a specific nature, it bears mentioning that many activities requiring the attention of this profession call only for stimulation, leadership—and *action*—by perhaps just one member within the area of his influence. A committee isn't always needed.

I assume at this point there is some apprehension because I have not mentioned the subject of political activity. I assure you it has not been neglected. I shall not, at this time, offer my personal opinions on the subject, or enter into the question of the competency of individual elected officials, but should rather take a broader view of the matter.

Neither shall I bore you with the problems of the unworkable, untenable, antisocial, undignified—and yes at times, inhuman and immoral—effects of certain legislation to which we are forceably made a party. Such programs are purported to furnish medical economic health benefits to those in our society who need them, but provisions of the law itself provide the maximum benefits and advantages to those who need them the least, rather than to the truly needy.

There is only one obvious answer to such social inequities. It is to be found not in accepting the benefits of this great system of government—but rather by fulfilling our responsibilities to elect truly conscientious officials at every level. We need officials who hold sacred the principles which—though expressed by mortals—are truly immortal. We need officials who still respect the dignity of the individual and feel a responsibility to the people who placed their trust in them.

Whether our efforts for better government are individual or collective, I plead now for action within the framework of everyone's conscience.

It has been said that compromise of principles is necessary because these are different times, that you have to compromise to stay in the game. If the game is staying aloof to the personal responsibility of all free men to enter into the everlasting fight to preserve true liberty and personal freedom, this might be true. Worth considering, however, is the fact that seeds of destruction are found in every act of the compromise of proven sound principles. If we play today's game, requiring this type of compromise, are we courting disaster?

As we continue our course let us remember that first we are physicians. However, we also have a position in society that requires a dedication of service to the world of which we are a part. We can best satisfy this second responsibility by first serving our profession in its joint endeavors to make this a better world for all.

Our complex society requires of everyone, and certainly no less of doctors, that we be interested in more than just our individual islands. We must not be content with being just a small sphere of influence unto ourselves. I plead for an individual effort, each according to his or her abilities, and a campaign jointly to do our job.

To anyone who has not felt he is interested or does not have the qualifications to serve, I would sincerely admonish you to just try it on for size, remembering that no one ever hit a home run unless he swung the bat.

I hope that 20 years hence, I can be here and again look back with a feeling of contentment that this profession has continued to be infused with a never-ending enthusiasm—with leaders and members willing to tackle their problems as I sincerely pray we may be able to tackle ours during the forthcoming year. ■

James R Kircher MD

WASHINGTON

Washington State Medical Association —444 N.E. RAVENNA BLVD., Seattle, Washington 98115

PRESIDENT *Lucius D. Hill III, M.D., Seattle*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual Meeting, Sept. 10-13, Seattle

AMPAC Features Dr. Henningsgaard At Closed-Door Session

BLAIR J. HENNINGSGAARD, M.D.

At 11:00 a.m. Sunday morning, September 10, during the 1967 Annual WSMA Meeting, the door of the Williamsburg Room of the Olympic Hotel will be tightly shut and a two hour session of "strictly politics" will begin for 1967 AMPAC members, key WSMA, County Society and Auxiliary officers and delegates.

Purpose of the no-host brunch will be to hear a first hand report from the chairman of the Board of Directors of AMPAC, Blair J. Henningsgaard, Astoria, Oregon.

Dr. Henningsgaard will discuss the results of AMPAC activity during the 1966 Congressional elections and what AMPAC's aims and programs are at the initial level for 1968.

Society of Nuclear Medicine Returns to Seattle

The Society of Nuclear Medicine was organized by Thomas Carlile, Milo Harris, Asa Seeds and Norman J. Holter, Ph.D., at an informal meeting in Spokane, January 24, 1954. First annual meeting was in Seattle, May 29, 30, the same year. Acceptance of the new organization was phenomenal and instead of a meeting of a few interested individuals in the Northwest, the organization became national almost from the moment it was announced. The fourteenth annual meeting, held in Seattle, June 20-23, 1967, produced ample evidence that the startling interest of the first few months has continued, and grown. Both meetings were remarkable.

From the beginning the Society of Nuclear Medicine has welcomed everyone interested in the field, regardless of profession. Physicists, chemists and others with advanced degrees happily joined physicians and lent added vigor to the new organization. Those with undergraduate degrees in science are brought in as Associate Members, and technicians are carried as Technical Affiliates. All join in the activities of the Society and participate in its benefits.

Not many medical organizations start a program at 7:45 a.m. but this one does, with teaching courses offering instruction in basic principles or in practical use of instruments and materials. These sessions were limited to 60 and those wishing to attend registered in advance. Every session was filled.

This year, for the first time, there was a session for technologists who discussed 22 subjects from 6:25 p.m., to 11:00 p.m. of the first full day of the meeting. Content of their program would leave most physicians completely baffled.

Even more baffling to the physician not familiar with nuclear medicine were many of the 194 papers delivered in the regular sessions. But nuclear medicine has reached a point at which it cannot be ignored. Organs, tumors, functions, even elements, are now being measured with accuracy heretofore impossible to attain. And the future holds great promise for advance in clinical medicine through use of isotopes. As an example Wil Nelp of the University of Washington School of Medicine, reported a new technique of measuring total body calcium by bombarding with neutrons, then measuring the activated calcium.

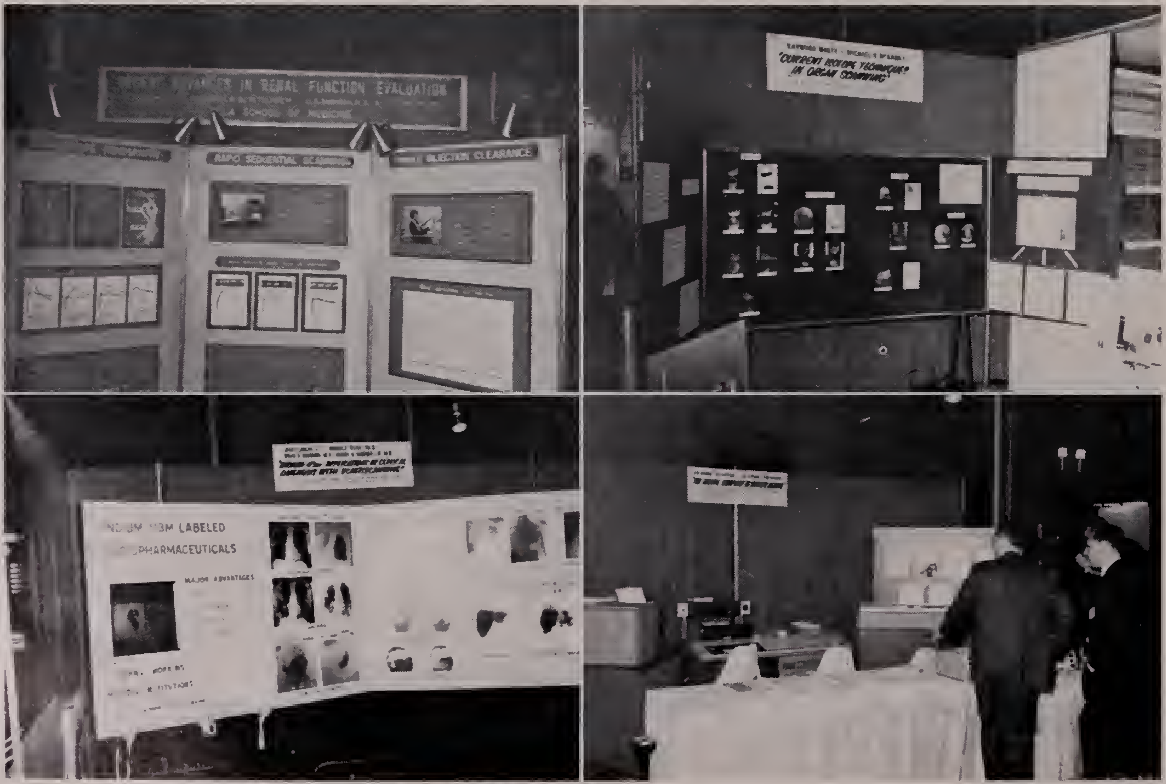
Many of the investigators reporting studies, used the technique of introducing isotopes, then counting at specific sites to estimate turnover of elements. New isotopes are being developed for scanning with resulting greater accuracy.

To indicate the breadth of interest of those in nuclear medicine, just a few of the topics discussed at the Seattle meeting included these: brain tumors, cerebral circulation, hydrocephalus, bones, joints, bone marrow, metastases to bone, heart, coronary flow, cardiac output, venous flow, peripheral circulation in diabetes, lymph nodes, circulating lymphocytes, phogocytic activity, kidneys, renal blood flow, salivary glands, thyroid, parathyroids, liver, lung, fat absorption, expired carbon dioxide, ventillation-perfusion ratios, mineral metabolism including iron, copper, zinc, manganese, iodine, and fluorine. Many of the techniques reported will be in regular clinical use in the near future.

As could be expected, there were a number of discussions on instruments, including the use of computers in a variety of situations. The meeting added emphasis to the opinion held by many that computers tied to other instruments are bound to take much of the labor out of diagnosis as well as improve accuracy.

There were excellent scientific and technical exhibits. Sixteen firms exhibited instruments and pharmaceuticals, many of them occupying extensive floor space to show a great variety of devices. To those who recall the Society's meeting at Salt Lake City only eleven years ago, the exhibit was an emphatic expression of the growth and rapidly increasing importance of nuclear medicine.

Local arrangements committee was headed by Wil Nelp, and included David Christie, Gordon LeZerte, Kenneth Moores and Paul Paulson. Membership on other committees reflected the international membership of the organization. They came from all major cities of the United States, Vienna, Mexico City, Tokyo, Santiago, Montreal, Ankara, Lima, and Bogota.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Report, 1967 AMPAC National Workshop

In the beginning was the word and the word was money. This was not the official theme of the 1967 AMPAC National Workshop June 3-4 in Washington, D.C., but it certainly proved to be the unofficial theme. The program outlined new modalities available to producing winning Congressional campaigns and emphasized the importance of AMPAC membership.

The AMPAC National Workshop began at 8:15 a.m. Saturday, June 3, and continued until 10 p.m. with no intermissions. The program started with a welcome from Blair Henningsgaard, the new national chairman of AMPAC's Board of Directors and our good neighbor from Oregon.

The first speaker, F. J. L. Blasingame, Executive Vice President of the AMA, in a talk titled "Where Go We" outlined the legislative and political picture from the viewpoint of the AMA.

Second speaker was the most unusual and extremely informative Miss Susan Walker, C.B.E., Vice Chairman of the Conservative and Unionist Party of Great Britain, who traced the history of her organization and the program they have in Great Britain to achieve a winning campaign. This little lady, speaking with experience of over 50 years in politics, received a standing ovation.

James H. Sammons, Baytown, Texas, National AMPAC Board of Directors, outlined AMPAC's 1967-68 priorities. This he categorized into membership, organization, education and candidate support activities. Membership, of course, ranked first since little can be done in other fields without strong membership. County Medical Societies were encouraged to include AMPAC dues on County Society billing forms. This direct billing procedure, when implemented, has produced substantial increases in AMPAC membership.

During the noon luncheon Senator Edmund Muskie of Maine talked on political participation. Saturday afternoon three people from different State PAC's reported on ideas discovered in 1966 which were valuable in making their PAC's move forward. Then three additional people from differing states discussed participation in state legislative races. Washington State was honored by having Harlan R. Knudson, Director, Division of Public Services & Government Affairs for the WSMA, invited to give a resume' of what we as a State PAC had accomplished.

One of the highlights of the National Workshop each year is a question and answer panel made up of prominent Congressmen and Senators. This year the panelists were Senator George Murphy, R.-Calif., Senator Walter Mondale, D.-Minn., Representative

continued on page 773

Sick,
and
worried
sick

Professionally posed

Anxiety and tension stemming from organic illness may undermine your patient's cooperation and possibly retard success of primary therapy.

If his emotional symptoms persist in the face of your counsel and reassurance, you may want to consider adjunctive use of SERAX (oxazepam). It is indicated in anxiety, tension, agitation, irritability, and anxiety associated with depression. May be used in a broad range of patients, usually with considerable dosage flexibility.

When prescribing, carefully observe dosage recommendations and appropriate precautions, especially as pertaining to the elderly and when complications could ensue from a fall in blood pressure. (See Wyeth literature or PDR as well as "IN BRIEF" below.)

IN BRIEF.

Contraindications: History of previous hypersensitivity to oxazepam. Oxazepam is not indicated in psychoses.

Precautions: Hypotensive reactions are rare, but use with caution where complications could ensue from a fall in blood pressure, especially in the elderly. Withdrawal symptoms upon discontinuation have been noted in some patients exhibiting drug dependence through chronic overdose. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose; excessive, prolonged use in susceptible patients (alcoholics, ex-addicts, etc.) may result in dependence or habituation. Reduce dosage gradually after prolonged excessive dosage to avoid possible epileptiform seizures. Withdrawal symptoms following abrupt discontinuance are similar to those seen with barbiturates. Caution patients against driving or operating machinery until absence of drowsiness or dizziness is ascertained. Warn patients of possible reduction in alcohol tolerance. Safety for use in pregnancy has not been established.

Not indicated in children under 6 years; absolute dosage for 6- to 12-year-olds not established.

Side Effects: Therapy-interrupting side effects are rare. Transient mild drowsiness is common initially; if persistent, reduce dosage. Dizziness, vertigo and headache have also occurred infrequently; syncope, rarely. Mild paradoxical reactions (excitement, stimulation of affect) are reported in psychiatric patients. Minor diffuse rashes (morbilliform, urticarial and maculopapular) are rare. Nausea, lethargy, edema, slurred speech, tremor and altered libido are rare and generally controllable by dosage reduction. Although rare, leucopenia and hepatic dysfunction including jaundice have been reported during therapy. Periodic blood counts and liver function tests are advised. Ataxia, reported rarely, does not appear related to dose or age. These side reactions, noted with related compounds, are not yet reported: paradoxical excitation with severe rage reactions, hallucinations, menstrual irregularities, change in EEG pattern, blood dyscrasias (including agranulocytosis), blurred vision, diplopia, incontinence, stupor, disorientation, fever and euphoria.

Availability: Capsules of 10,15 and 30 mg. oxazepam.

To help you relieve anxiety and tension

Serax®
(oxazepam)

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SERVICE
TO
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Wyeth Laboratories
Philadelphia, Pa.

BOOKS

RECEIVED: The following books have been received Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

Biomedical communications: problems and resources. Consulting editor, James Lieberman. Published by the New York Academy of Sciences. 111 pp. (Collection of papers) Price $6. 1967.

A manual of closed reduction of closed fractures and dislocations. By Robert Mazet, Jr., Professor of Orthopedic Surgery, University of California at Los Angeles; Chief of the Orthopedic Service, Los Angeles Veterans Hospital. 131 pp. Illustrated. Price $10.50. 1967. Springfield, Ill. Charles C Thomas.

Pathologic physiology, mechanisms of disease. By William A. Sodeman, Sc.D., F.A.C.P., Professor of Medicine, Dean and Vice President for Medical affairs, Jefferson Medical College; and William A. Sodeman, Jr., Chief Gastroenterology Section, Ann Arbor Veterans Administration Hospital, Instructor, Dept. of Internal Medicine, University of Michigan Medical School. 4th edition. 1051 pp. Illustrated. Price $19. Philadelphia, W. B. Saunders Co., 1967.

Treatment of hyperthyroidism with radioactive iodine. By John E. Kearns, F.A.C.S., Assoc. Professor of Surgery, Northwestern University and Evanston Hospital; former chairman of Isotope Therapy & Research Dept., Evanston Hospital, Evanston, Illinois. 73 pp. Illustrated. Price $6.50. Springfield, Ill., Charles C Thomas, 1967.

Renal carcinoma. By James L. Bennington, Director of Pathology, King County Hospital and Asst. Professor of Pathology, University of Washington School of Medicine; and Robert M. Kradjian, Staff Surgeon, Kaiser Foundation Hospital, Oakland California and Consulting Surgeon, Highland Alameda Hospital, Oakland, Calif. 263 pp. Illustrated. Philadelphia, W. B. Saunders, 1967.

Ciba foundation: mongolism. Edited by G.E.W. Wolstenholme, O.B.E., M.A., F.R.C.P., F.I. Biol., and Ruth Porter, M.R.C.P. 99 pp. Illustrated. Boston, Little, Brown & Co., 1967.

Ciba foundation: effects of external stimuli on reproduction. Edited by G.E.W. Wolstenholme, O.B.E., M.A., F.R.C.P., F. I. Biol. and Maeve O'Connor, B.A. 107 pp. Illustrated. Boston, Little, Brown & Co., 1967.

Cecil-Loeb textbook of medicine. (12th edition) Edited by Paul B. Beeson, Nuffield Professor of Clinical Medicine, University of Oxford; and Walsh McDermott, Livingston Farrand Professor of Public Health, Cornell University Medical College. 1738 pp., Illustrated. Price: Single volume —$20.50; Two-volume set—$24.50; Deluxe Two volume—$30. Philadelphia, W. B. Saunders Co., (June) 1967.

Ballistocardiography and cardiac performance. Edited by Abraham Noordergraaf and Gerald H. Pollack, Dept. of Biomedical Engineering, The Moore School of Electrical Engineering, University of Pennsylvania, Philadelphia, Penna. 150 pp. Illustrated. Price $9.25. St. Louis, Missouri, Warren H. Green, Inc.; 10 S. Brentwood Blvd., (June) 1967.

Sleep: its nature and physiological organization. Werner P. Koella, Senior Scientist, Worcester Foundation for Experimental Biology, Shrewsbury, Mass. 199 pp. Illustrated. Price $10. Springfield, Ill., Charles C Thomas, (June) 1967.

Fundamentals of neuropathology. (2nd edition) William Brooks Dublin, Pathologist, Laurel Grove Hospital, Castro Valley, Calif.; and Assoc. Clinical Professor of Pathology, University of California College of Medicine, Los Angeles, Calif. 478 pp. Price $24.50. Illustrated. Springfield, Ill., Charles C Thomas, (April) 1967.

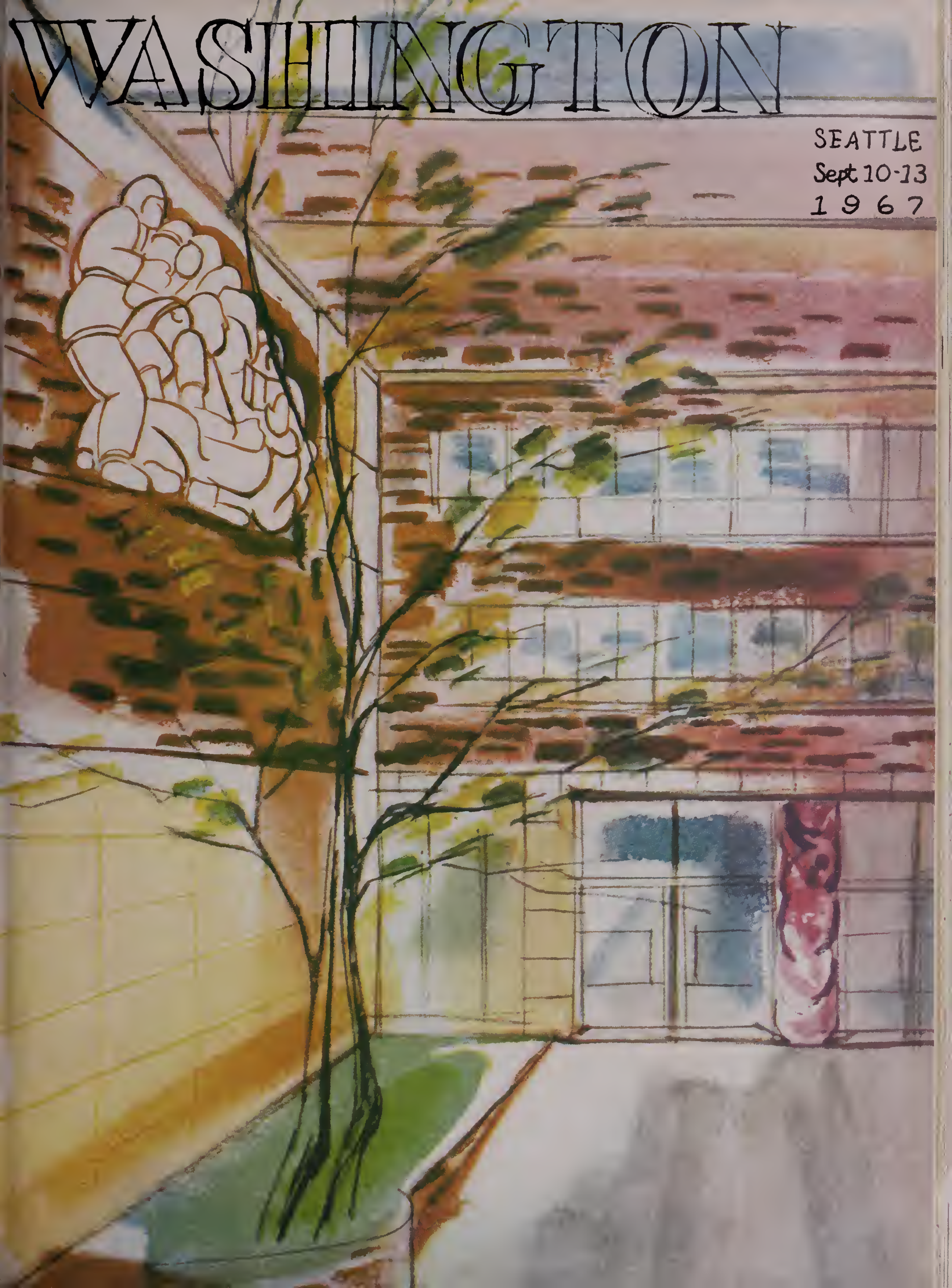
Pathology. (3rd edition) By Stanley L. Robbins, Professor & Chairman, Dept. of Pathology, Boston University School of Medicine. 1434 pp. Illustrated. Price $20.50 single volume; 2 volume set-$25. Philadelphia, W. B. Saunders Co., (June) 1967.

Handbook of physical therapy. By Robert Shestack, PH.-G.R.P., P.T.R., Technical Director, Dept. of Physical Therapy, Washington County Hospital, Hagerstown, Maryland. 212 pp. Price $4. New York. Springer Publishing Co., Inc (June) 1967.

Care of the patient with a stroke. By Genevieve Waples Smith, R.N., M.A., Administrator, Seaside Hospital, Seaside, Oregon. 148 pp. Price $3.25. New York, Springer Publishing Co., Inc. Illustrated (June) 1967.

WASHINGTON

SEATTLE
Sept 10-13
1967



An Invitation

LUCIUS D. HILL, III, M.D.

Annual meeting of the Washington State Medical Association has developed into one of the largest medical meetings held in the Northwest. In contrast to many specialty organization meetings, it is the only meeting that includes representatives from all specialties of medicine, including general practice. Because it attracts this diverse audience, the State Association has made every effort to make this the best postgraduate medical assembly available.

Consistent with our efforts in developing continuing medical education for the physicians in this area, it is our intent to make the annual meeting a "showcase" for continuing medical education. To this end we have attracted an outstanding group of speakers, beginning on Sunday night with James L. Goddard, head of the Federal Drug Administration and one of the most sought after and articulate speakers in the health field.

There will be 13 guest speakers, among whom will be Nobel Prize winner Joshua Lederberg, whose discourse on genetics entitled "From Cell Genesis to Human Nature" promises to be a stimulating and informative discussion.

The theme of the scientific program is "Monitoring the Seriously Ill Patient." In addition to pertinent talks on the new trends in monitoring and biomedical engineering, practical tours of hospital patient monitoring facilities will be made available to all those interested. These tours will consist of actual visits to coronary care units, as well as intensive care units, where the latest in monitoring devices will be displayed by the hospitals in Seattle. Scientific papers and high quality movies will round out an outstanding scientific program, along with outstanding scientific exhibits.

On Tuesday, Governor Daniel Evans will address the convention. In view of the passage of important health measures in the 40th session of the legislature, this promises to be an important address. In addition, the House of Delegates will consider the many important measures that have come before the Association during the past year. The development of our Foundation, our role in the Regional Medical Program, comprehensive health planning, and many other measures will be considered and our future course outlined by the action of your delegates.

The efforts extended by your scientific program and exhibits committee have succeeded in creating, for the benefit of the membership, as fine a medical meeting as could be had anywhere in the United States. Mark the dates September 10-13 on your calendar. We shall look forward to seeing you at the Olympic Hotel for the 78th annual meeting of your Association.

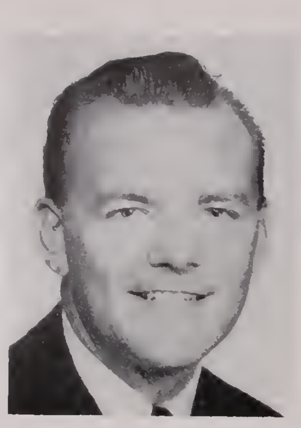
Annual meeting of the Washington State Medical Association has the largest attendance of any scientific medical program in the Northwest. With this drawing power as a challenge, it becomes the responsibility of the Program Committee to produce a postgraduate educational session that maintains educational quality and, at the same time has broad appeal. This is no easy task.

Proliferation of medical meetings, postgraduate courses, regional and national specialty conferences and university sponsored programs directed toward the general practitioner, has obliged us to re-examine the need for a scientific program for the meetings of Washington State Medical Association. Some have suggested that they be eliminated. Others believe that the program should be reorganized to minimize competition of specialty sessions, and some prefer only general sessions with no conflicts.

All of these arguments have validity, but if the program is to unite interests of specialists, subspecialists and general practitioners in one state association program, we believe the best results will be accomplished by a program such as that planned for the forthcoming September session. Speakers, whose portraits and subjects will be found on the next three pages, guarantee a provocative, interesting, educational experience.

Easily deserving the most advance interest is the lecture on cell genetics and human nature to be delivered Tuesday morning by Nobel Prize winner, Joshua Lederberg, Ph.D. Robert Simpson, who urged him to come to the Seattle meeting, reports that his presentation is a fabulous excursion into the realm of manipulated genes—an intellectual's glimpse of what we may be doing tomorrow. Other lectures will be directed toward what is being met in clinical practice today. Caliber of the speakers, and practicality of the subjects offered should guarantee ample reward for attending this meeting. Please give careful consideration to the next three pages.

ROBERT M. HEGSTROM, M.D.
Chairman, Program Committee



C. PHILIP LARSON, JR., M.D.

Assistant Professor and
Vice Chairman
Department of Anesthesiology

University of California
Medical Center

San Francisco, California

Atelectasis—an enigma in medicine

LESTER A. KIRKENDALL, PH.D.
Professor of Family Life
Oregon State University
Corvallis, Oregon
The physician as a sex educator

J. LYNWOOD HERRINGTON, JR., M.D.
Clinical Associate Professor
of Surgery and Surgeon
Vanderbilt University School of Medicine
Emergency and non-planned colon resection on the unprepared bowel
A twenty year experience with vagatomy-antrectomy for complications of duodenal ulcer

GUEST SCIENTIFIC SPEAKERS

JOSHUA LEDERBERG, PH.D.
Chairman, Department of Genetics
Stanford University School of Medicine
Palo Alto, California
Awarded Nobel Prize in 1958 for studies on organization of the genetic material in bacteria
From cell genetics to human nature

C. RONALD STEPHEN, M.D.

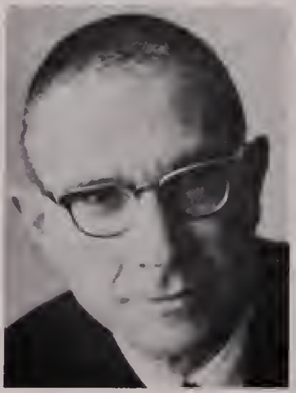
Professor of Anesthesiology

The University of Texas
Southwestern Medical School

Dallas, Texas

Patient monitoring

ARTHUR JAMPOLSKY, M.D.
Director, Smith-Kettlewell Institute
of Visual Sciences and Chief,
Department of Opthalmology
Presbyterian Medical Center
San Francisco, California
A simplified diagnostic routine for strabismus
Complications of strabismus surgery



ALBERT E. RENOLD, M.D.
Professor of Clinical Biochemistry
University of Geneva, Switzerland
Walker-Ames Visiting Professor
of Medicine
University of Washington
Spontaneous diabetes in animals

JUDD MARMOR, M.D.
Director, Division of Psychiatry
Cedars-Sinai Medical Center
Clinical Professor of Psychiatry
University of California at
Los Angeles
Changing patterns of femininity:
psychoanalytic implications

1967 Annual Meeting
Washington State Medical Association
September 10-13 . . . Olympic Hotel . . . Seattle

ROBERT H. WILLIAMS, M.D.
Professor of Medicine and Head
Division of Endocrinology
University of Washington School
of Medicine
Seattle, Washington
The diagnosis and management of
hypoglycemia

DONALD W. SELDIN, M.D.
Professor and Chairman
Department of Internal Medicine
The University of Texas
Southwestern Medical School
Dallas, Texas
Effect of calcium on the kidneys
The pathogenesis and treatment
of edema

Special Guest Scientific Speakers

Pediatrics and General Practice Joint Seminar on Immunization

Monday, September 11

SAMUEL L. KATZ, M.D.
Chairman Infectious Disease Unit
Children's Hospital Medical Center
Boston, Massachusetts
Measles and smallpox immunization

PAUL F. WEHRLE, M.D.
Chief Physician
Pediatric and
Communicable Disease Service
Los Angeles County General
Hospital
Hastings Professor of Pediatrics
University of Southern California
Los Angeles, California
Diphtheria, pertussis, and tetanus

SAUL KRUGMAN, M.D.
Professor and Chairman
Department of Pediatrics
New York University Medical
Center, New York
Mumps vaccine and use and abuse
of gamma globulin

Scientific Exhibits

The Asbestos Body vs the Human Body

An Occupational Hazard in Puget Sound

John M. Sproul, M.D. and David G. Mason, M.D., Seattle

An impressive number of industries are now using an equally impressive amount of the fibrous mineral silicates known as asbestos. This exhibit includes a resume' of the problem in the State of Washington from the points of view of sources of exposure and claims to the Disability Insurance Unit of the Department of Labor and Industries in Olympia and the necessity for adequate control measures. Clinical roentgenographic characteristics are illustrated and a review of plumonary functional data from 10 patients is presented. The exhibit concludes with photographs of pathologic material from one of these patients who died from a complication of long-standing disease.

Central Venous Pressure and the Circulatory System

Jay Kranz, M.D., Sherman Day, M.D., Dean Crystal, M.D. and Clyde Wagner, M.D.,
Seattle

Central Venous Pressure, (CVP) occupies more and more space in contemporary considerations of circulatory disturbances from shock to heart failure. Despite these contributions the relationship of this determination to other clinical features has often seemed confusing. Descriptions are hampered by the inherent difficulties in describing the characteristics of a dynamic circulation in words and static pictures. The working model presented here demonstrates the interactions of heart action, peripheral resistance and blood volume with the resulting reflections in arterial and venous pressures and renal output.

Mesenteric Vascular Insufficiency

Leland Burnett, M.D., Clarence Pearson, M.D., Robert Paine, M.D.,
Lucius D. Hill III, M.D. and John Antonius, M. D., Seattle

Exhibit demonstrating the clinical, radiographic and pathologic findings in mesenteric vascular insufficiency. The cases particularly demonstrate the presence of this disease in young women.

Homograft Replacement of the Aortic Valve

K. A. Merendino, M.D., Ph.D., David H. Dillard, M.D., Loren W. Winterscheid, M.D.,
Ph.D, Hitoshi Mohri, M.D., Dr. Medical Science, and Robert W. Barnes, M.D., Seattle

The complications of prosthetic heart valves have encouraged intensive clinical and experimental studies of homografts for aortic valve replacement at the University of Washington. Sustained functional durability of single homologous leaflets was demonstrated in 40 dogs. Histologic, tissue culture, and sex chromatin studies have shown low antigenicity, prolonged donor cell survival and lack of rejection of homologous valves. Clinical use of aortic valve homografts in 35 patients without postoperative anticoagulation has established the practicality of such valves. The exhibit will portray the rationale, techniques of procurement, operative techniques, experimental and clinical experience and advantages of aortic valve homografts.

Examination of the Middle Ear

Paul Paulson, M.D., Richard Voorhees, M.D., John McMillan, M.D., and
Author Griffin, M.D., Seattle

Polytome radiography of the temporal bone provides pre-operative evaluation of the temporal bone that never could be appreciated with conventional radiographic technique. The complications of chronic otitis media, of cholesteatoma, and the extent of fractures and the internal anatomy of the middle ear in congenital atresia, can now be well evaluated. The preoperative requirements of micro-surgery of the ear in evaluating the ossicular chain, the oval and round windows, the footplate of the stapes and the course of the facial nerve can now be obtained in precise detail. Otosclerosis involving the cochlea, causing nerve loss, may be confirmed.

How to Approach an Eye

Dan M. Gordon, M.D., New York

The exhibit will cover the fundamentals of an eye examination — stressing the conditions which the non-ophthalmologist can and cannot handle, illustrating important diagnostic hints. The differentiation between conjunctival and ciliary injections will be illustrated as well as indications for the use of anti-inflammatory agents with or without antimicrobrials. (Conjunctivitis vs intraocularly induced inflammations), technique of fluorescein staining, tonometry, eversion of the upper lid, control of lids in a possibly perforated eye, immediate first aid of burns, perforated eye traumatic hyphema, lid lacerations, foreign bodies, rust rings, and so forth. A simple eye tray would be illustrated. When to use dilating drops and when not. When to patch, and so forth.

description of exhibits continued on page 771

Against these three major pathogens…

Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemolytic Streptococci

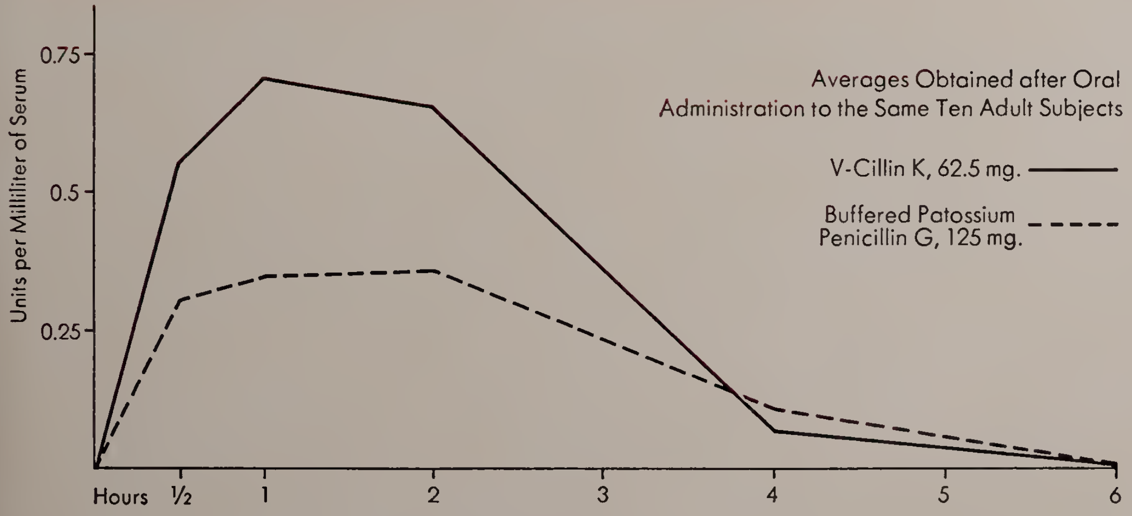
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph.Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplacaccus Pneumaniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxocillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med.,269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6 253, 1964.

V-Cillin K®

700867

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses

Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Refractory infections generally respond to a second treatment three to four days following completion of the first. Treatment of gonorrhea with severe complications should be individualized, with prolonged and intensive treatment. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [032067]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

700867

continued from page 767

Care and Rehabilitation of the Ostomy Patient

Homer Ross, Frank Hoppes, Hazel Harrison, Leora M. Smith, Frances Newell
(Sponsored by Lucius D. Hill III, M.D., Seattle)

This exhibit illustrates the many educational and service activities of the Ostomy Mutual Aid Society. Pre - and postoperative conferences with patients on physician request, regularly scheduled meetings, informative publications and presentations to doctors and nursing groups give full explanation of the care of all types of stomas. The latest appliances and accessories available for the comfort and care of patients with a stoma are shown. Doctors requesting assistance are offered experience and technical knowledge in the selection of appliances and in management of stoma. Encouragement and psychological aid is given to the preoperative patient.

Endocrinology and Metabolism

Diabetes and Hypoglycemia; Chromosomes and Gonads; and the Metabolic Consequences of "The Pill"

Robert H. Williams, M.D., C. Alvin Paulsen, M.D. and Neil J. Elgee, M.D., Seattle

An exhibit of some of the latest developments relative to the diagnosis and treatment of hypoglycemia, diabetes mellitus and related disorders. The importance of chromosomal abnormalities in the etiology of testicular and ovarian disease will be illustrated. The elevated blood sugars and PBI's seen in women on "The Pill" are frequently misinterpreted and the exhibit will attempt to clairify these common problems.

The Hand and Disease

Kenneth R. Wilske, M.D., Robert Stack, M.D., and Don Ballman, M.D., Seattle

The hand often presents to the physican a first line reflection of local and systemic disease. Against the reference of a normal hand model, this exhibit presents a number of commonly seen disease processes as mirrored in the hand, a recognition of which may provide important diagnostic information to the physician.

Cervical Disc Disease

John E. Nilan, M.D., Seattle

Degeneration of a cervical intervertebral disc occurs when the continuity of the protective annulus fibrosis is compromised. An attempt will be made to show the gradual changes from the early internal rupture of the disc, which can only be diagnosed by discography, to the protruded disc or to the late degenerative changes with marked hypertrophic spur formation. Also, an attempt will be made to correlate the early symptoms to the late compression and vascular changes. The symptoms that can be produced by the degenerated cervical intervertbral disc will be listed and compared with some of the disease entities that they might mimic.

Medical Aspects of Sports

Protective Headgear

Harry H. Kretzler, Jr., M.D., Seattle; Orvis A. Harrelson, M.D., Tacoma; T. R. Ingham, M.D., Olympia; Walter J. Kennedy, M.D., Yakima; Lawrence M. Knopp, M.D., and James D. Layman, M.D., Seattle; O. Charles Olson, M.D., Spokane; Erwin R. Slade, M.D., Snohomish; Vaughn Smith, M.D., Wenatchee

To acquaint the physician with the policies and recommendations of the AMA and WSMA in regard to sports medicine. To give him information to use in the counseling of school and parents on sports participation for youngsters. The display will include a wide variety of protective headgear used in various sports.

X-Ray of the Month on Page 729

The preoperative clinical diagnosis was carcinoma. The preoperative radiological diagnosis was diverticulitis. The surgical and gross pathological differential diagnosis of these two lesions is often difficult or impossible. A correct differential radiological diagnosis is usually the most accurate method and this becomes most important if the choice of primary resection, colostomy or no immediate surgery is dictated by the condition of the patient.

In the case presented, a sinus tract is seen extending from the region (number 4). This can occur either with neoplasm or diverticulitis but is more frequently encountered in the latter. In this case the margin of the constricting lesion (number 2) is gradually tapering rather than under-cut or constricting, again favoring the diagnosis of diverticulitis. Mucosal folds are preserved (number 3) in diverticulitis, whereas in neoplasm they are destroyed. Adjacent diverticulosis may not always be demonstrated in diverticulitis. Inflammatory reaction in the necks of diverticula may prevent barium filling of the sacs and therefore only the sharply pointed necks are demonstrated on close examination (number 1). This again favors diverticulitis. In the case of non-inflammatory carcinoma, adjacent diverticula fill completely with barium.

Final pathologic diagnosis was diverticulitis.

Course on Blood Transfusion

A continuing medical education course on Laboratory Aspects of Blood Transfusion is being offered September 21 and 22 at the University of Washington School of Medicine.

The purpose of the course is to review the rationale and the performance of standard tests used in the blood transfusion laboratory, to discuss the common problems associated with transfusion, and to describe some new lines of approach toward resolving these problems.

The course is sponsored by the King County Central Blood Bank, the University of Washington School of Medicine, Division of Continuing Medical Education, and the Washington State Society of Medical Technologists.

Enrollment fee for physicians is $25.

Shadel Hospital

12001 Ambaum Boulevard, S.W.
Seattle, Washington 98146
CH 4-8100

The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

APPROVED BY THE AMERICAN MEDICAL ASSOCIATION

MEMBER OF THE AMERICAN HOSPITAL ASSOCIATION

continued from page 757

Bob Wilson, R.-Calif., and Representative Don Fuqua, D.-Florida. (Photo below.)

The main speaker at the Sunday breakfast was Representative Robert Michel, R.-Ill., who gave a rundown on the tremendous help of the Illinois PAC in his 1966 election campaign. The final Sunday session began with Robert Novak, national syndicated news analyst, predicting "What's Ahead in 1968."

Hale Sweeney, Ph.D., from Research Triangle Institute, followed with a discussion concerning Research and Campaign Methodology-Status and Goals. This detailed the use of computers and data processing equipment in selecting individual voters on the basis of socio-economic background and other characteristics.

Mrs. Frank Gastineau, Indianapolis, AMPAC Board of Directors, spoke of the importance of volunteer polling projects and what can be accomplished with this technique. John Kernodle, Burlington, North Carolina, gave a rundown on literature, films and other tools available for winning campaigns in 1968. George Lawrence, Flushing, New York, wound up with his talk, "All Systems Go." He summarized the workshop by stating we must recognize the needs in each district, need for political education and motivation.

Attending the 1967 AMPAC Workshop were Dr. and Mrs. Charles D. Muller, WSMA president elect, Bremerton, Mrs. Clayton Noonan, Seattle, WSMA Auxiliary president elect, Dr. and Mrs. Kenneth D. Moores, Seattle, Dr. John L. McKay, Seattle, Mr. Fred Cook, Executive Secretary, King County Medical Society, Mr. Knudson and Thomas H. Skrinar, chairman, AMPAC, State of Washington.

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for topical antibiotic therapy with minimum risk of sensitization

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

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Complete literature available on request from Professional Services Dept. PML.

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All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than the 15th of the month preceding date of issue. Proof is not shown. Copy of ad as it appeared in the journal accompanies billing.

PRACTICE OPPORTUNITIES

INTERNIST ASSOCIATE WANTED—Expanding practice, new multiple discipline medical building, hospital adjacent. Stable community, good schools, fabulous recreational area in Pacific Northwest. Full details in first letter. Write Box 2-A, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

PHYSICIAN WANTED—To become associated with group providing occupational and environmental health services for large atomic energy plant. Opportunity for special projects or clinical research depending on interest and qualifications. Regular hours, excellent living conditions and climate in a Washington State growth area. An equal opportunity employer. Write Box 1-A, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

INTERNIST—Four days a week, guaranteed salary $20,000 year to start. Progressive 10-man group, modern facilities, Southern California coastal city near Los Angeles. Write Robert Gumbiner, M.D., Medical Director, Family Health Program, 2925 No. Palo Verde, Long Beach, Calif. 90815.

OREGON COASTAL OPENINGS—For two general practitioners. New 41-bed district hospital serving about 6,000 residents. Three physicians at present. Office space and financing available. Richest per-capita city in Oregon. Abundance of recreation and mild climate. Contact Jack W. Cadwell, Administrator, New Lincoln Hospital, Toledo, Ore. 97391.

WEALTHY CITY OF 2,000—Needs one physician or team of two or three. Center of huge wheat growing trade area of 5,000. Hospital 15 years old now undergoing $200,000 modernization. 20's, 30's and 40's always saw three good practices here. Your mail inquiries or personal inspection cordially invited. Write Ritzville Chamber of Commerce, Ritzville, Wash. 99169, phone 659-1020.

OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

MEDICAL CENTER IN WESTERN WASH.—Has an opening for an internist and a dermatologist in a medical specialty group. City expanding rapidly with big industry and future outlook very promising. Climate and recreational facilities are excellent. Write Box 15-C Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

SURGICAL RESIDENCY, PACIFIC NORTHWEST— Draft call has created unexpected vacancy in 1st year of 4-year parallel approved program. Residents uniformly successful in board examination and in practice of surgery. Affiliations provide added technical experience to active hospital program which includes cardiac and vascular surgery as well as surgical subspecialties. Wide spectrum of clinical experience in referral center. Write Box 33-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

GENERAL PRACTITIONER—Four days a week, guaranteed salary $20,000 year to start. Progressive 10-man group, modern facilities, Southern California coastal city near Los Angeles. Write Robert Gumbiner, M.D., Medical Director, Family Health Program, 2925 No. Palo Verde, Long Beach, Calif. 90815.

NEUROSURGEON—For 65-man Permanente Clinic, Portland, Oregon. Starting income $30,000, Insurance benefits, retirement program, etc. N. W. Frink, M.D., Permanente Clinic 5055 N. Greely, Portland, Oregon 97217.

PEDIATRICIAN—For pediatric group—4-man pediatric partnership. Losing partner to full-time academic work. Excellent facilities. Prefer young man with 3 years specialty training and military obligation completed. Early full partnership. For further information write G. J. Schunk, M.D., 115 Mission S., Salem, Ore. 97302.

NURSE ANESTHETISTS— Immediate openings in large teaching hospital, Seattle. Five days Monday thru Friday. No call, no weekend assignments. Please send resume' to Box 37-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

OTOLARYNGOLOGIST—For 65-man clinic servicing the Kaiser Health Plan in Oregon. Starting income $30,000; regular increases for 10 years. Insurance benefits, retirement program. N. W. Frink, M.D., Permanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

SURGICAL PRECEPTORSHIPS—Open July 1, 1967, for one or two year appointments. American Board credit if three year residency completed. Oregon license required for 2nd year but not for 1st. If foreign graduate, ECFMG and permanent visa required. Salary $800 per month. N. W. Frink, M.D., Permanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

RADIOLOGIST—Certified in diagnosis and therapy or eligible, to join well established rediologist in beautiful Puget Sound country in Washington State. Live in vacation scenery and climate the year round. Country population 100,000. Hospital and office practice established for 21 years. Generous compensation to start, with full partnership planned after 10 to 12 months trial association. For details if seriously interested, write Box 35-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

EXCELLENT GP OPPORTUNITY—To associate with 3 very busy practitioners. One with residency in surgery preferred. Financial arrangements open. Fully equipped office, good hospital facilities. Pacific Northwest, mouth of Columbia River, Astoria, Ore. Write Box 40-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

GENERAL PRACTITIONER—For group practice. Time off. Salary open. Northwest Seattle. Write Box 39-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

PERSONNEL SERVICE

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AMA Clinical—Houston, November 26-29, 1967; Miami Beach, 1968.

Oregon Medical Association—Sept. 19-23, Portland.

Washington State Medical Association—Sept. 10-13, 1967, Seattle

Idaho Medical Association—June 26-29, 1968, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society — Annual Meeting, Sept. 24-27, 1967. Salishan, Gleneden Beach, Oregon
Pres., John W. Whitelaw, Vancouver, B.C.
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy.—April 4-6, 1968, Hilton Hotel, Portland, Oregon.
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Pres., Serge Bryner, Palo Alto, Calif.

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
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West Coast Allergy Society—Nov. 30-Dec. 2, 1967, Phoenix, Arizona
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Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
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Oregon District Branch of American Psychiatric Association (Jan., April, Oct.)
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
Sec., E. W. Landreth, Portland

Oregon Radiological Society — University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Frederick R. Asbury, Corvallis
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society — Quarterly Meetings, Congress Hotel, Portland
Pres., Donald Beardsley, Portland
Sec., C. A. Macfarlane, Portland

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland
Sec., David Sellers, Portland

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Pres., C. W. Van Rooy, Portland
Sec., Glenn Lembert, Portland

Portland Academy of Psychiatry — Fourth Tuesday except Dec., June, July, Aug.
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Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May)
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland

UOMS Alumni Association — Annual Meeting, April 24-26, 1968, Portland
Pres., I. I. Langley, Portland
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WASHINGTON

King County Acad. Gen. Pract. — 4th Mon., exc. June, July, Aug., Dec.
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Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Glen E. Hayden, Seattle
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Seattle Pediatric Society — 3rd Friday (Sept.-May), Arctic Club
Pres., James Tucker, Seattle
Sec., Janice Keller, Seattle

Seattle Surg. Soc. — 4th Mon. (Sept.-June)
Pres., Carl Hutchinson, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society — Quarterly
Pres., Otto J. Penna., Spokane
Sec., Robert E. Jensen, Spokane

Tacoma Academy of Internal Medicine —4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
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Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
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Wash. St. Soc. of Anesthesiologists Quarterly Seattle Annual Meeting, Sept. 3, 1967
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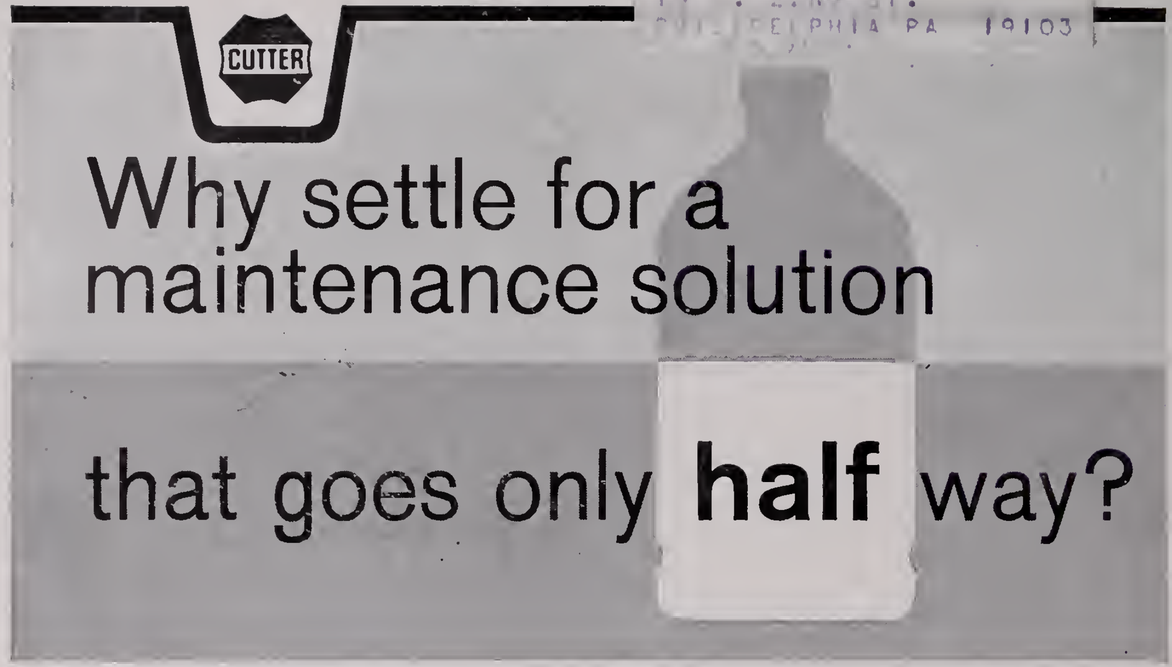

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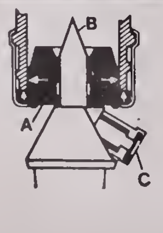

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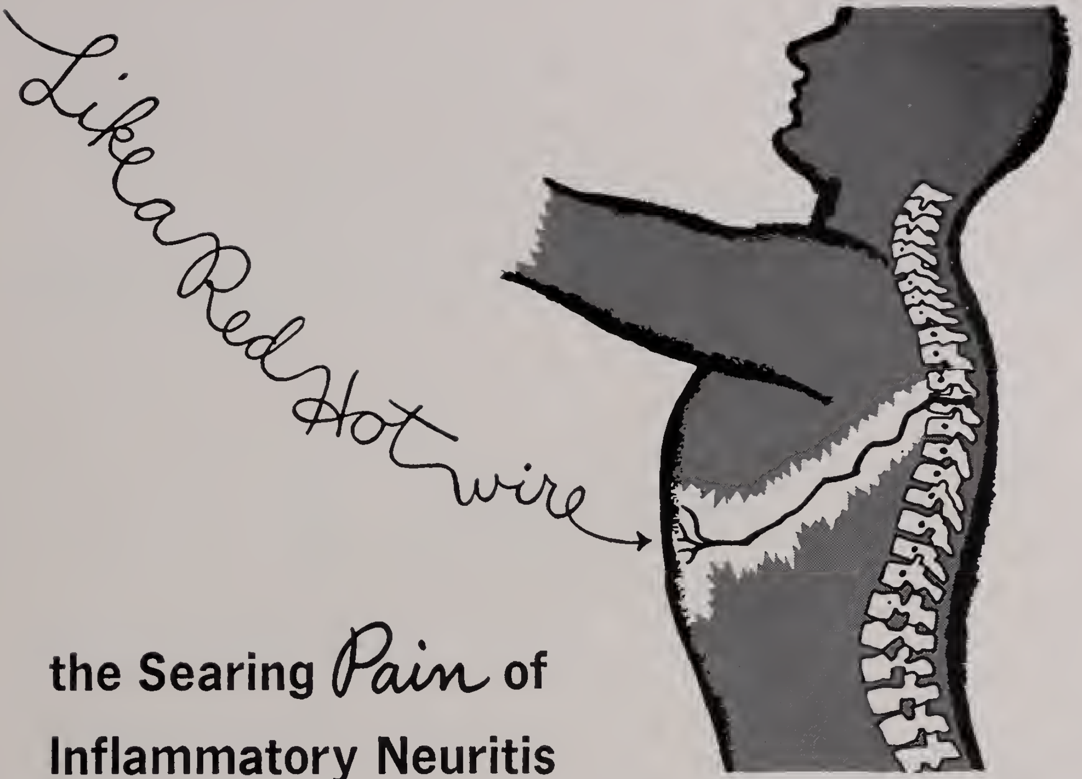
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Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin/5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

NOTES

Way cleared for DMSO. In a remarkably frank news release last month, the Food and Drug Administration announced a decision not to prosecute drug companies and investigators who had allegedly failed to comply with all FDA regulations in testing DMSO. The governmental bureau admits that its own position was not entirely sound. It would appear from this release that FDA intends to remove the road block to scientific testing of the drug's value. Representative Wendell Wyatt, of Oregon, has waged a vigorous campaign to take scientific investigation out of the hands of FDA, keeping that bureau as a policing body. In support of his proposed legislation he has called DMSO a "persecuted drug."

Patients may inquire about a relatively new organization touting "non-toxic beneficial therapies" for cancer. The Organization has been given publicity in a commentator program released by small radio stations in Seattle, Portland and Spokane. Among other things being promoted are krebiozen, laetrile, nicolini, hoxsey, koch, and mucorhicin. Most of the physicians offering these treatments are in Mexico. A. C. Ivy's name appears after the word krebiozen. One of the names appearing on their literature is Dr. Ernst T. Krebs, Jr., San Francisco. Directory of the AMA lists Ernst T. Krebs, 642 Capp Street, San Francisco, born 1877, graduate of College of Physicians and Surgeons of San Francisco. He is listed as not in practice. The school suspended teaching in 1918.

Continuing increase of "medical costs" is cited by Michigan Blue Shield as the major stimulus for a projected study to cost $100,000. Plan is to re-evaluate, refine and revamp techniques to measure utilization. Yield is expected to be more efficient use of medical services, at lower cost. Seems reasonable to guess that cost of operating service plans, always added to actual medical costs, will not be mentioned. And the project seems destined to continue the suggestion that physicians get all the money spent on health care, by calling it all "medical." Much clearer concept could be achieved by separating costs of health care from costs of care provided by physicians. Medical care can be provided legally only by physicians. Health care can be provided by hospitals and technicians but, no matter how essential their services may be, they cannot provide medical care. Why do we continue to imply that physicians are responsible for all the increases?

Blood isn't always tired. According to the Federal Trade Commission, most tired people do not have tired blood. Therefore, the advertisements about tired blood must also state that most tired people do not have iron deficiency anemia and, unless they do, the heavily advertised product won't do them any good. Ruling of the FTC has been upheld by the Sixth Court of Appeals.

H.L.H.

even better together
in mild hypertension
Serpasil®-Esidrix®
(reserpine and hydrochlorothiazide CIBA)
Combination Tablets

Serpasil-Esidrix combines reserpine (the original, and most widely used, rauwolfia alkaloid developed by CIBA) with hydrochlorothiazide (the most widely used oral diuretic, also a product of CIBA research).

even better blood pressure reduction—because 2 antihypertensive agents of choice often work better together

One drug potentiates the antihypertensive action of the other. Blood pressure is generally controlled with relatively low dosages of each component, often resulting in minimized side effects.

Although each component alone may provide adequate therapy in many cases of mild hypertension, the combination offers advantages which cannot be achieved with single-drug therapy.

even more patient benefits—because complementary actions of 2 antihypertensive agents extend the range of advantages

Reserpine, in addition to lowering blood pressure, provides central calming action to help relieve anxiety and tension; provides bradycrotic action to slow the rapid heart.

Hydrochlorothiazide, in addition to lowering blood pressure, relieves edema; permits relaxation of salt restriction.

The combination provides medication in one tablet instead of two; one prescription instead of two—encourages patient adherence to the regimen, offers economy.

for your next patient with mild hypertension

Rx Serpasil-Esidrix

Combination Tablets

Please see following page for prescribing information.

Serpasil®-Esidrix®
(reserpine and hydrochlorothiazide CIBA)
Combination Tablets

INDICATIONS: Mild to moderate hypertension, especially when complicated by anxiety, tachycardia, or edema.

SIDE EFFECTS AND PRECAUTIONARY MEASURES

Serpasil® (reserpine CIBA)
Occasional side effects: lassitude, drowsiness, nasal congestion, looseness of stools, increased frequency of defecation. Rare side effects: anorexia, headache, bizarre dreams, nausea, dizziness, skin rash.

Severe mental depression has appeared in a small percentage of patients, primarily in a dosage above 1 mg daily. When the drug is discontinued, depression usually disappears, but hospitalization and shock therapy are sometimes required.

Caution: Withdraw reserpine 2 weeks before surgery, if possible. For emergency surgical procedures, give vagal blocking agents parenterally to prevent or reverse hypotension and/or bradycardia.

Because reserpine may increase gastric secretion of hydrochloric acid, use cautiously in patients with peptic ulcer.

Use cautiously with digitalis, quinidine, or guanethidine. Not recommended for aortic insufficiency.

Esidrix® (hydrochlorothiazide CIBA)
Contraindictions: Oliguria, renal shutdown, progressive hepatic disease, and allergy to thiazides.

Warnings: Stenosis, hemorrhage, and ulceration of the small bowel have occurred with coated potassium tablets. Discontinue such medication when used with Esidrix if gastrointestinal disturbances arise.

Pay special attention to electrolyte balance of patients with severe renal or hepatic insufficiency. In patients with cirrhosis and ascites, watch for symptoms of impending hepatic coma. Thiazides may decrease glucose tolerance; use cautiously in diabetics. Hyperuricemia may occur but is readily reversed by a uricosuric agent. Lowering of blood pressure may sometimes result in nitrogen retention, particularly in patients with impaired renal function. Dosage titration is necessary in such patients.

Precautions: Watch for signs of fluid or electrolyte imbalance. Further electrolyte depletion may cause hypochloremic alkalosis and hypokalemia. Since the latter may precipitate digitalis intoxication, watch carefully patients who are taking digitalis or its glycosides or those with cardiac arrhythmias. In severe hypokalemia, large oral or intravenous doses of potassium may be required.

A few infants born of mothers who received thiazides during pregnancy have shown bone marrow depression with thrombocytopenia. Hydrochlorothiazide decreases responsiveness to exogenous norepinephrine and increases responsiveness to tubocurarine. Hypotensive episodes under anesthesia have been observed in some patients receiving thiazides.

Side Effects: In addition to those above, nausea, anorexia, headache, restlessness, constipation, dizziness, paresthesias, fatigue, increased sweating, cramps in arms and legs, diarrhea, abdominal pain. Rare reactions: purpura with or without thrombocytopenia, skin rash, photosensitivity, urticaria. Sometimes associated with hydrochlorothiazide: leukopenia, agranulocytosis, aplastic anemia, pancreatitis, jaundice, necrotizing vasculitis.

DOSAGE
Average dosage is 2 *Tablets #2* daily. For patients requiring less hydrochlorothiazide, substitute *Tablets #1*. For maintenance, reduce dosage to lowest effective level. When necessary, more potent antihypertensive agents may be added gradually in reduced dosages.

SUPPLIED
Tablets #2 (light orange), each containing 0.1 mg reserpine and 50 mg hydrochlorothiazide; bottles of 100 and 1000. *Tablets #1* (light orange), each containing 0.1 mg reserpine and 25 mg hydrochlorothiazide; bottles of 100 and 1000.

Consult complete literature before prescribing.

CIBA Pharmaceutical Company, Summit, N. J. CIBA

2/3595

CORRESPONDENCE

This department is a forum, provided for free individual expression. Letters are published as received and given little or no editing. Proof is submitted when time permits, before publication. Responsibility for statements rests with the authors of these communications and not with this journal which strives only to protect the right of individuals to speak for themselves. Ed.

Legal Status of Nurse When Treating Cardiac Emergency

Editor, NORTHWEST MEDICINE:

The information sent so far on Intensive Care Units has been very helpful.

There is just one other factor about which there is doubt. I wonder if any information is available regarding the legal liability in connection with the administration of electric shock to a patient with a serious arrhythmia or cardiac standstill. I understand insurance companies generally will not accept delegation of such responsibility.

Very sincerely yours,
WILLIAM A. JOHNSON, M.D.
Longview, Wash. (98632)

The above letter was sent to Henry E. Kastner, attorney for Washington State Medical Association. His reply follows. Ed

Editor, NORTHWEST MEDICINE:

Your letter to me of August 1 has reference to the legal liability of a nurse in giving an electric shock treatment to a patient with a serious arrhythmia or cardiac standstill.

The scope of a professional nurse's practice is defined by statute to include the following:

> At or under the general direction of a licensed physician, dentist or osteopath or chiropodist (acting within the scope of his license) to administer medications, treatments, tests and inoculations, whether or not the severing or penetration of tissues is involved and whether or not a degree of independent judgment and skill is required.

It would seem, thus, that if a nurse were directed to do so by a physician, such a shock treatment would be within the scope of the nurse's license. Absent a direction by a physician, a serious question arises as to whether or not the nurse in doing such a procedure would be invading the practice of medicine. Under statute a professional nurse is given the right to perform acts in the care and counsel of the ill, but this right does not include acts of diagnosis or prescription of therapeutic or corrective measures.

Assuming the nurse acts under the direction of a

continued on page 792

mudrane®

for

- EMPHYSEMA
- ASTHMA
- CHRONIC BRONCHITIS
- BRONCHIECTASIS

The fast-disintegrating uncoated tablet gives relief in 15 minutes

Each tablet contains:

Potassium Iodide .... 195 mg.
Aminophylline .... 130 mg.
Phenobarbital, Caution: May be habit forming ... 21 mg.
Ephedrine HCl .... 16 mg.

FEDERAL LAW PROHIBITS
DISPENSING WITHOUT PRESCRIPTION

Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

DOSAGE

One tablet, with full glass of water, 3 or 4 times daily.

Dispensed in bottles of 100 and 1000 tablets.

MUDRANE GG—Formula, dosage and package identical to Mudrane—*except*—100 mg. glyceryl guaiacolate replaces the potassium iodide. The value of Mudrane cannot be enjoyed by a small group in which K.I. is contraindicated. Mudrane GG is prepared for this group.

MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

WM. P. POYTHRESS & CO., INC.
RICHMOND, VIRGINIA 23217
Manufacturers of ethical pharmaceuticals since 1856

Soyalac
SOLVES THE PROBLEM

for the infant who requires a milk-free diet!

- Soyalac satisfies! Baby is happy, mother is grateful, doctor is gratified.
- The nut-like taste is pleasing. Infants readily accept this hypoallergenic formula that is completely fibre-free. An exclusive process results in a consistency much like milk.
- Soyalac is strikingly similar to mother's milk in composition and ease of assimilation. Clinical data furnish evidence of Soyalac's value in promoting normal growth and development.
- Excellent for regular infant feeding, too—and for growing children and adults.

Soyalac

a product of
LOMA LINDA FOODS
MEDICAL PRODUCTS DIVISION
RIVERSIDE, CALIFORNIA
Mount Vernon, Ohio, U.S.A.

Free Booklet and Samples

A request on your professional letterhead or prescription form will bring to you complete information and a supply of samples.

GENERAL NEWS

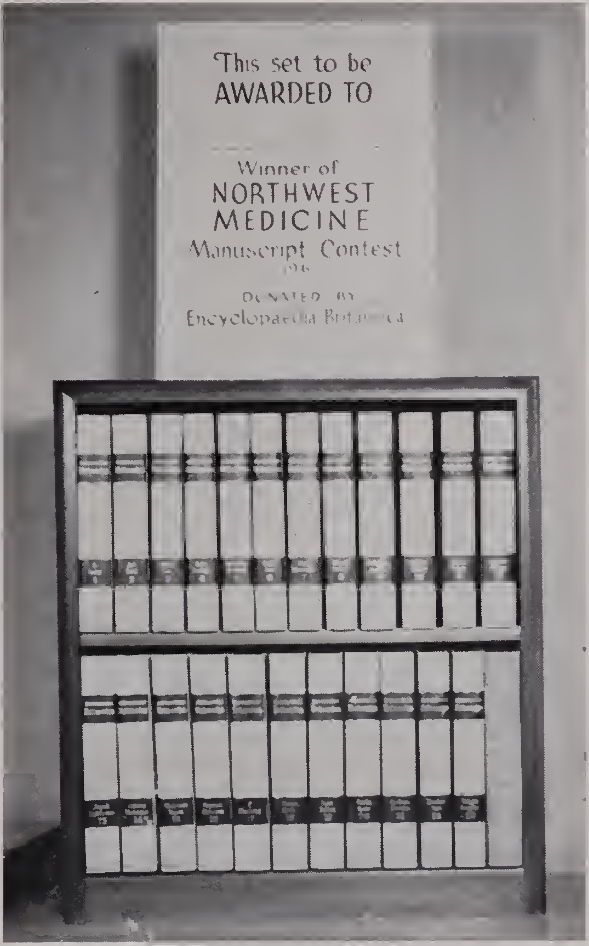
Prize for Good Writing

Cash award of $200, a bronze plaque, and a 24-volume Encyclopaedia will be presented this month to the author of the winning manuscript in the first annual Northwest Medicine Manuscript Contest, open to interns and residents of the Northwest. Award will be made at the meeting of the state medical association of the state in which the winner serves.

All manuscripts submitted have been reviewed by each member of the Editorial Advisory Board (names will be found on the masthead page) and have been ranked in order of excellence. The top three entries, determined by combined scores, have been submitted to William W. Krippaehne, Howard P. Lewis, K. Alvin Merendino, and Robert G. Petersdorf for final selection.

The winning manuscript will be published and others, deemed worthy, will also be published, such acceptance being considered an Honorable Mention award.

Funds for the cash award come from Encyclopaedia Britannica, according to the announcements sent to all readers of this journal. Encyclopaedia Britannica also donated the full set and bookcase, valued at more than $500.



North Pacific Pediatric Society Meeting

Paul F. Wehrle, Professor of Pediatrics, University of Southern California, and Herbert C. Mansmann, Jr., Pediatric Allergist, University of Pittsburg, will be the featured guest speakers at the 95th meeting of the North Pacific Pediatric Society this month.

The meeting is scheduled for September 24-27 at Salishan Lodge, Gleneden Beach, Oregon.

Program

Monday, Sept. 25

9:10 a.m.	Negro Physicians and Other Negro Health Personnel	Robert Aldrich, M.D.
9:30 a.m.	Spina Bifida Cystica a follow-up study	Leslie G. Andrews, M.D.

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physician, she should, of course, have received instruction and training in the performance of such shock treatment. The standard to which she would be held would be that of the practitioner in the community under like circumstances.

Sincerely yours,
HENRY R. KASTNER

Request to Copy

Editor, NORTHWEST MEDICINE:

Will you please be so kind as to see that the enclosed letter to the editor of Northwest Medicine be directed to the proper person. Unfortunately I do not receive Northwest Medicine nor does our library but if Dr. Jones' article is a fair sample of the calibre of material published by this journal I believe we are missing much.

With best regards, I am,

Sincerely yours,
R. C. DERBYSHIRE, M.D.

Editor, NORTHWEST MEDICINE:

Dr. Charles H. Jones of Portland, Oregon, was kind enough to send me a reprint of his article which appeared in your journal in June, 1967, entitled, "Narcotic Addiction of Physicians." I consider this an excellent article and believe that it should be given wider readership. May I please have your permission to reprint this in a latter issue of the Federation Bulletin? Of course full credit would be given to NORTHWEST MEDICINE.

I have already written to Dr. Jones asking for his permisison to reproduce his article.

Sincerely
R. C. DERBYSHIRE, M.D.
Editor, Federation Bulletin
227 East Palace Avenue
Santa Fe, New Mexico (87501)

VALIUM®
(diazepam)Roche®

Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage—*Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.

ROCHE

Roche Laboratories
Division of
Hoffmann-La Roche Inc.
Nutley, N.J. 07110

IMPORTANT NEW INSIGHTS INTO HUMAN RESPONSE TO EMOTIONAL STRESS:

New confirmation of the effectiveness of Valium® (diazepam)

Ask your Roche representative to arrange a presentation of this important and fascinating research into certain somatic responses to emotional stress . . . quantitative, objective measurement with double-blind controls.

◀ *Please see opposite page for important prescribing information.*

Winthrop

announces

a breakthrough in the control of pain

Talwin®

brand of
pentazocine
(as lactate)

a potent, injectable non-narcotic

For every physician who has ever prescribed morphine

Talwin is the new potent non-narcotic injectable analgesic which is indicated for relief of all types and degrees of pain in acute and chronic disorders. Talwin 30 mg. is usually as effective an analgesic as morphine 10 mg. or meperidine 75 to 100 mg., but needs no narcotics controls; its duration of action may sometimes be less than that of morphine.

Talwin is relatively free from adverse effects of morphine, such as constipation, urinary retention, or severe respiratory depression. It has been used, in varying dosages, in over 12,000 patients for relief of pain of medical disorders, of active labor and postoperative pain; also for preoperative or preanesthetic medication, and as an adjunct to anesthesia.

A brochure incorporating analyzed information on Talwin is available. The completeness of the information will permit you to evaluate the role Talwin can play in your practice.

You can depend on Talwin to relieve pain:

WHATEVER the intensity of the pain
the cause of the pain
the site* of the pain
the duration of the pain
the chronicity of the pain
the age† of the patient

Talwin does not require a narcotics prescription

The World Health Organization Expert Committee on Dependence-Producing Drugs concluded that "... there was no need at this time for narcotics control of pentazocine [Talwin] internationally or nationally." (*WHO Tech. Rep. Ser.*, No. 343, 1966, p. 6.)

It is our sincere belief that the discovery of Talwin by Winthrop Laboratories will be of great value to you and your patients for whom you may have to prescribe a potent analgesic.

*Talwin should not be used for patients with increased intracranial pressure, head injury or pathologic brain conditions.

†Until sufficient experience is gained, it should not be administered to children under 12 years of age.

Talwin — brand of pentazocine (as lactate)

Contraindications: *Increased Intracranial Pressure, Head Injury, or Pathologic Brain Conditions in which clouding of sensorium is undesirable.* Talwin (brand of pentazocine) should not be administered in these cases, since drug-induced sedation, dizziness, nausea, or respiratory depression could be misleading.

Precautions: *Pregnancy.* No teratogenic or embryotoxic effects attributable to the use of Talwin have been seen in extensive reproductive studies in animals; however, like all new drugs, Talwin should be given with caution to pregnant women. A large number of patients in labor have received the drug with no adverse reactions other than those that occur with commonly used strong analgesics. However, as with other strong analgesics, Talwin should be used with caution in women delivering premature infants.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Certain Respiratory Conditions. The possibility that Talwin (brand of pentazocine) may cause respiratory depression should be considered in treatment of patients with bronchial asthma. Talwin (brand of pentazocine) should be administered only with caution and in low dosage to patients with respiratory depression (e.g., from other medication, uremia, or severe infection), obstructive respiratory conditions, or cyanosis.

Patients Dependent on Narcotics. Because Talwin is a narcotic-antagonist, patients dependent on narcotics and receiving Talwin may occasionally experience certain withdrawal symptoms. Talwin should be given with special caution to such patients. It has been observed that some patients previously given narcotic-analgesics for one month or longer had mild withdrawal symptoms when the drug was replaced with the analgesic, Talwin. After a short period of adjustment the subjects were usually able and willing to continue taking Talwin, and relief of pain was satisfactory.

Nonaddicted Patients Receiving Narcotics. Symptoms believed to be indicative of antagonism to the opiate may be observed rarely with administration of Talwin to patients receiving opiates for a short time. Intolerance or untoward reactions are seldom observed after administration of Talwin to patients who have received single doses or who have had limited exposure to narcotics.

Impaired Renal or Hepatic Function. Although laboratory tests have not indicated that Talwin (brand of pentazocine) causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment. Extensive liver disease appears to predispose to greater side effects (e.g., marked apprehension, anxiety, dizziness, sleepiness) from the usual clinical dose, and may be the result of decreased metabolism of the drug by the liver.

Myocardial Infarction. As with all drugs, Talwin (brand of pentazocine) should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Adverse Effects: Talwin is relatively free from the undesirable side effects associated with morphine, such as constipation, urinary retention, or severe respiratory depression. Furthermore, Talwin produces less nausea, vomiting, and diaphoresis than meperidine.

In over 12,000 patients who received Talwin intramuscularly, subcutaneously, or intravenously, nausea, the most frequent adverse effect, occurred in approximately 5.0 per cent. In decreasing order of occurrence were vertigo, dizziness or lightheadedness; vomiting; and euphoria. Respiratory depression was reported as an adverse reaction in 1.0 per cent.

The incidence of each of the other adverse effects was well below 1.0 per cent: constipation, circulatory depression, diaphoresis, urinary retention, alteration in mood (nervousness, apprehension, depression, floating feeling), hypertension, sting on injection, headache, dry mouth, flushed skin including plethora, altered uterine contractions during labor, dermatitis including pruritus, dreams, paresthesia, and dyspnea occurred rarely after administration of Talwin (brand of pentazocine). Furthermore, each of the following adverse reactions occurred in less than 0.1 per cent: tachycardia, visual disturbance (blurred vision, diplopia and nystagmus), hallucinations, disorientation, weakness or faintness, muscle tremor, chills, allergic reactions including edema of the face, taste alteration, insomnia, diarrhea, cramps, and miosis; laryngospasm in one patient.

Talwin has not produced severe respiratory embarrassment in adults (never apnea), even with large amounts. A small number of newborn infants whose mothers received Talwin during labor had transient apnea. The incidence of temporary diminution in the rate or strength of uterine contractions is low after administration of Talwin, similar to that following meperidine hydrochloride. (In reporting no interference with normal labor in patients receiving Talwin, one investigator further stated that the drug may increase uterine activity.) Generally, no significant fetal heart rate change occurs.

Laboratory tests of blood and of liver and kidney functions have revealed no significant abnormalities. A minimum and probably insignificant increase in the per cent of eosinophils in peripheral blood counts and bone marrow occurred occasionally.

Talwin is well tolerated by patients with diabetes mellitus, and no changes in insulin requirements have been observed.

Dosage and Administration: *Adults, Excluding Patients in Labor.* Average recommended single parenteral dose is 30 mg., by intramuscular, subcutaneous, or intravenous route; may be repeated every three to four hours. Pain has been relieved in most patients with not more than three doses daily. Infrequently, selected patients have received single doses as high as 60 mg. *Patients in Labor.* A single, intramuscular 30 mg. dose has been most commonly administered. An intravenous 20 mg. dose has given adequate pain relief to some patients in labor when contractions become regular, and this dose may be given two or three times at two- to three-hour intervals, as needed.

Children Under 12 Years of Age. Since clinical experience in children under twelve years of age is limited, the use of Talwin (brand of pentazocine) in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who received Talwin for prolonged periods (e.g., over 300 days) experienced no withdrawal symptoms even when administration was stopped abruptly; furthermore, there was no tolerance to the analgesic effect.

CAUTION. Talwin should not be mixed in the same syringe with soluble barbiturates because precipitation will occur.

Treatment of Overdosage or Respiratory Depression. Talwin has not produced apnea or severe respiratory embarrassment in adults, even in large doses. Occasionally, however, moderate respiratory depression may occur. Means of maintaining oroper oxygenation should be available in case of overdosage or respiratory depression, and methylphenidate (Ritalin®) should be administered parenterally. The usual narcotic-antagonists, such as nalorphine, are not effective respiratory stimulants for depression due to Talwin.

How Supplied: *Ampuls of 1 ml.*, containing Talwin® (pentazocine) as lactate equivalent to 30 mg. base and 2.8 mg. sodium chloride, in Water for Injection. **Boxes of 10, 25, and 100.**

***Multiple dose vials of 10 ml.*, each 1 ml. containing Talwin (pentazocine) as lactate equivalent to 30 mg. base,** 2 mg. acetone sodium bisulfite, 1.5 mg. sodium chloride, and 1 mg. methylparaben as preservative, in Water for Injection. **Boxes of 1.**

The pH of Talwin solutions is adjusted between 4 and 5 with lactic acid and sodium hydroxide.

Winthrop

Winthrop Laboratories, New York, N.Y. 10016

In peptic ulcer... antacid therapy with a new benefit

CONTAINS A BALANCED
COMBINATION
OF THE MOST WIDELY
USED ANTACIDS—
FOR RAPID
NEUTRALIZATION.
PLUS SIMETHICONE—
TO CONTROL
THE FACTOR WHICH
ANTACIDS ALONE
CANNOT INFLUENCE.

Mylanta®

- In Mylanta, aluminum and magnesium hydroxides are balanced to minimize the chance of constipation or laxation and still achieve rapid acid neutralization and pain relief.
- The positive action of simethicone helps relieve the painful gas symptoms which often accompany the peptic ulcer syndrome.
- The nonfatiguing flavor and smooth, nongritty consistency of tablets and liquid encourage continued patient cooperation during long-term therapy.

Composition: Each Mylanta chewable tablet or teaspoonful (5 ml.) of liquid contains: magnesium hydroxide, 200 mg.; aluminum hydroxide, dried gel, 200 mg.; simethicone, 20 mg. **Dosage:** one or two tablets, well chewed or allowed to dissolve in the mouth, or one or two teaspoonfuls of liquid to be taken between meals and at bedtime.

The Stuart Company, Pasadena, California
Division of Atlas Chemical Industries, Inc.

Stuart

A Building Block approach to treating hypertension

ABBOTT

With these three therapeutic building blocks you can create a once-a-day regimen to fit almost any degree of hypertension. See the following pages for details . . .

Consider starting your hypertensives on this basic thiazide

ABBOTT

A single daily dose of Enduron provides sodium excretion around the clock

Enduron is a true 24-hour single-dose thiazide. Its sodium excretion is not squeezed into an abrupt peak during the first several hours. It is well-sustained in a plateau-like effect—with little reduction for the first 12 hours, and decline thereafter only gradual.

Potassium loss, by contrast, is low. It reaches an early minor peak, then subsides rapidly. Moreover, since dosage is but once a day, there is but one daily peak of potassium loss. As with all thiazides, however, dietary potassium supplementation should also be considered, especially in long or intensive therapy.

Use Enduron as an ideal starting therapy in mild hypertension. Use it too, as a basic therapeutic building block with which other agents can be joined, for managing your more resistant hypertensives.

Once a day, every day

ENDURON®
METHYCLOTHIAZIDE

DAILY DOSAGE RANGE	Minimum	Usual	Intermediate	Maximum
	2.5 mg. tablet	5 mg. tablet	7.5 mg.	10 mg.

See Brief Summary on final page of advertisement.

To build added response, shift to Enduronyl

ABBOTT

The deserpidine component adds enhanced antihypertensive activity

The rauwolfia component of Enduronyl is deserpidine (Harmonyl®), a purified crystalline alkaloid supplied only by Abbott. It augments Enduron with its own antihypertensive and tranquilizing action.

Thus the combined clinical effect of these two therapeutic building blocks in Enduronyl is greater than can ordinarily be achieved with either alone.

To add flexibility, Enduronyl comes in two strengths: regular and Forte. Both provide 5 mg. of Enduron. The variation is where most helpful: in the deserpidine. The tablets are scored, and give a surprisingly wide and economical choice of once-a-day doses (see below).

Choose Enduronyl for your patients in the broad range of mild to moderate hypertension. Patient acceptance is excellent!

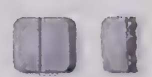
Once a day, every day

ENDURONYL®

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.25 MG.

ENDURONYL FORTE

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.5 MG.

	Minimum	Usual	Intermediate	Maximum
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.125 mg. deserpidine	 5 mg. methyclothiazide 0.25 mg. deserpidine	 7.5 mg. methyclothiazide 0.375 mg. deserpidine	 10 mg. methyclothiazide 0.5 mg. deserpidine
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.25 mg. deserpidine	 5 mg. methyclothiazide 0.5 mg. deserpidine	 7.5 mg. methyclothiazide 0.75 mg. deserpidine	 10 mg. methyclothiazide 1 mg. deserpidine

See Brief Summary on final page of advertisement.

707075-R

Eutonyl affords a different kind of basic therapy for moderate to severe cases

ABBOTT

Effect tied to reduced peripheral vascular resistance; no central depressant action

Eutonyl is a unique nonhydrazine agent. It is reported to act by reducing peripheral vascular resistance.[1,2]

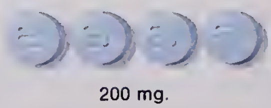
In clinical trials, significant reductions in mean blood pressure were seen in 84% of patients studied—all were moderate to severe cases. Eutonyl lowers diastolic in proportion to systolic, and in about half of the cases studied, reductions in the sitting and recumbent positions were nearly as great as in the standing position.

Most important: There is no central depressant action. In fact, some patients reported an *increased* sense of well being.

Here, then, is a highly effective *basic treatment* for moderate to severe cases—and one that will not hamper your patient with lethargy or drowsiness while on treatment.

Once a day, every day

EUTONYL®
PARGYLINE HYDROCHLORIDE

DAILY DOSAGE RANGE	Minimum	Usual starting	Intermediate	Maximum
				
	10 mg. tablet	25 mg. tablet	50 mg. tablet or as needed	200 mg.

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1. Brest, A. N., et al., Cardiac and Renal Hemodynamic Response to Pargyline, Ann. N. Y. Acad. Sci., 107-1016, 1963.
2. Winsor, T., Pargyline Hydrochloride, Hypertension, Urinary Tryptamine, and Vascular Reflexes, Geriatrics, 19:598, Aug., 1964.

See Brief Summary on final page of advertisement.

Eutron adds thiazide for enhanced therapy with milder side effects

ABBOTT

Only a 7/4 mm. span between standing and recumbent pressures in clinical trials—reduced chance of orthostatic hypotension

The combining of Eutonyl and Enduron in Eutron permits a significantly greater antihypertensive effect than with either agent used alone. This in turn may allow therapeutic success with lesser dosage—and correspondingly milder side effects.

A significant finding in clinical trials was the drug's action in lowering blood pressure to *nearly equal levels in all body positions*. Total average spread between standing and recumbent readings (after treatment) was only 7/4 mm. Hg.

Thus, in your moderate to severe cases, Eutron affords a usually smooth course of therapy, often with reduced likelihood of orthostatic effects. (The usual precautions against rising suddenly, of course, will always apply.) And, because of the thiazide component, Eutron may be used in the presence of congestive heart failure.

Once a day, every day

EUTRON™
PARGYLINE HYDROCHLORIDE 25 MG.
WITH METHYCLOTHIAZIDE 5 MG.

	Minimum	Usual starting	Intermediate	Maximum
DAILY DOSAGE RANGE	 12.5 mg. pargyline hydrochloride and 2.5 mg. methyclothiazide	 25 mg. pargyline hydrochloride and 5 mg. methyclothiazide	 37.5 mg. pargyline hydrochloride and 7.5 mg. methyclothiazide	 50 mg. pargyline hydrochloride and 10 mg. methyclothiazide

See Brief Summary on final page of advertisement.

TM—Trademark

707075-R

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg.

Indications: Enduron is used to control edema and mild to moderate hypertension; also used with other drugs for hypertension. Enduronyl is used in mild to moderately severe hypertension; when used with Enduronyl, more potent agents can be given at reduced dosage to minimize undesirable side effects.

Contraindications: Neither Enduron nor Enduronyl should be used in severe renal disease (except nephrosis) or shutdown; in severe hepatic disease or impending hepatic coma; in patients sensitive to thiazides. Hepatic coma has been reported as a result of hypokalemia in patients receiving thiazides.

Enduronyl is contraindicated in patients with severe mental depression and suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity reactions in patients with a history of allergy or asthma. If added potassium intake is indicated, dietary supplementation is recommended. Enteric-coated potassium tablets should be reserved for cautious use only when adequate dietary supplementation is not practical because those tablets may induce serious or fatal small bowel lesions consisting of stenosis with or without ulceration. These small bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs.

Precautions: Use thiazides with caution in severe renal dysfunction, impaired hepatic function, or progressive liver disease. In surgical patients, thiazides may reduce the response to vasopressors and increase the response to tubocurarine. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism have been reported in certain newborn infants). Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. Antihypertensive response may be enhanced following sympathectomy.

Use Enduronyl with caution in patients with a history of peptic ulcer, as rauwolfias may increase gastric secretion. Discontinue at the first sign of mental depression. Rauwolfia alkaloids may increase hypotensive effects of surgery or anesthesia, and should be discontinued two weeks prior. They also lower the convulsive threshold and shorten seizure latency. In epilepsy, dosage adjustment of anticonvulsant medication may be necessary. Alcohol, barbiturates, or narcotics may potentiate action of deserpidine.

Adverse Reactions: During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). All patients should be observed for signs of hyponatremia ("low-salt" syndrome). Reported thiazide reactions include: anorexia, nausea, vomiting, diarrhea, headache, skin rash, dizziness, paresthesia, weakness, photosensitivity, jaundice, and pancreatitis.

Reported rauwolfia reactions include: nasal stuffiness, nausea, weight gain, diarrhea, aggravation of peptic ulcer, epistaxis, skin eruption, and reduction of libido and potency. Excessive drowsiness, fatigue, weakness, and nightmares may signal early signs of mental depression.

EUTONYL® | EUTRON™

PARGYLINE HYDROCHLORIDE

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone. It is desirable to establish the dosage of Eutron by administering component drugs separately.

TM-Trademark.

Contraindications: Pheochromocytoma, advanced renal disease, increasing renal dysfunction, paranoid schizophrenia and hyperthyroidism. Hepatic coma has been reported as consequence of hypokalemia with thiazide therapy. Until further experience is gained not recommended for patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. 2 week interval should separate therapy and use of these agents.

Methyclothiazide is contraindicated in patients with known sensitivity to thiazides.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When indicated, alcohol, narcotics (meperidine should be avoided), antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers, or caffeine, may be used cautiously in reduced dosage. In emergency surgery ¼ to ⅕ the usual dose of narcotics, analgesics, and other premedications should be used avoiding parenteral administration where possible. Carefully adjust dose of anesthetics to response of patient. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or coronary artery disease should not increase physical activity with an improvement in well being. Pargyline may lower blood sugar.

Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions consisting of stenosis with or without ulceration. These small-bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs. These products contain no added potassium salts and if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical. In patients with a history of allergy or asthma the possibility of sensitivity reactions should be considered.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields and fundi. Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. In surgical patients thiazides may reduce response to vasopressors and increase response to tubocurarine.

Adverse Reactions: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extrapyramidal symptoms have been reported in a few patients with reduced cardiac reserve.

During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). Observe all patients for signs of hyponatremia ("low salt" syndrome).

Reported thiazide reactions also include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, and pancreatitis. Nocturia has been observed with the combination.

709075R

ABBOTT

Overweight problem?

Pat, this was taken Aug 1962

This is your mother,
picture taken May 26, 1963
Love Mom

These are photographs borrowed from the files of a Missouri physician. The grossly overweight patient pictured in August 1962 succeeded in shedding 110 pounds in the following ten months by adhering to a diet program under the supervision and encouragement of her physician. To help control her desire for food and also "burn off" additional calories, the physician recommended Obestat, one tablet a day. Doctor and patient admit that Obestat fortified her determination to stick to the diet during the difficult weeks of adjustment.

Obestat can help your overweight patient break the eating habits that cause obesity.

Obestat suppresses appetite.

Obestat boosts metabolism.

Obestat offsets emotional symptoms.

Each OBESTAT TY-MED* tablet or capsule contains: Methamphetamine hydrochloride 10 mg./Amobarbital (Warning, may be habit forming) 60 mg./Thyroid 150 mg.

*Lemmon brand of timed-release medication.

Dosage: One Obestat Ty-Med tablet or capsule daily, taken before breakfast, is satisfactory for most patients. Occasionally, 2 tablets or capsules may be required.

Side Effects: Side effects such as headache, dizziness, nervousness, excitability, insomnia, dyspnea, palpitation or gastrointestinal distress are infrequent and usually mild.

Precautions: An increase in blood pressure or basal metabolic rate should be observed carefully.

Contraindications: Myocardial or coronary disease, diabetes, marked hypertension, hyperthyroidism or idiosyncrasy to the ingredients.

Supplied: Bottles of 30, 100 and 1000 tablets or capsules.

Caution: Federal law prohibits dispensing without prescription.

References: Ort, F.: Adjuvant treatment of obesity with an anorectic-calorigenic agent, Clin Med 70:1999 (Nov) 1963. Isenberg, C. L.: Treatment of the overweight patient in general practice, Clin Med 72:663 (Apr) 1965. ©1966 HAACK 1-66 MADE IN U.S.A.

HAACK LABORATORIES, INC.
DIVISION OF LEMMON PHARMACAL CO., PORTLAND, OREGON 97208

Obestat helps.

Tissue's healing nicely. Yet anxiety slows his steps toward recovery.

By helping overcome anxiety and tension which can thwart the convalescent's progress, EQUANIL (meprobamate) often may play an important role in medical and surgical aftercare.

Cautions: Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use may result in dependence or habituation in susceptible persons—as ex-addicts, alcoholics, severe psychoneurotics. After prolonged high dosage, drug should be withdrawn gradually to avoid possibly severe withdrawal reactions including epileptiform seizures. Side effects include drowsiness and, rarely, allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute non-thrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If an allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Warn patients of possible reduced alcohol tolerance. Should drowsiness, ataxia, or visual disturbances occur, dose should be reduced. If symptoms persist, patients should not operate vehicles or dangerous machinery. A few cases of leucopenia, usually transient, have been reported following prolonged dosage. Other blood dyscrasias—aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis and hemolytic anemia—have occurred rarely, almost always in the presence of known toxic agents. One fatal case of bullous dermatitis following intermittent use of meprobamate with prednisolone has been reported. Prescribe very cautiously for patients with suicidal tendencies. Suicidal attempts should be treated with immediate gastric lavage and appropriate supportive therapy.

Contraindications: History of sensitivity to meprobamate.

Composition: Tablets, 200 mg. and 400 mg. meprobamate. Coated Tablets, WYSEALS® EQUANIL (meprobamate) 400 mg. Continuous-Release Capsules, EQUANIL L-A (meprobamate) 400 mg.

Wyeth Laboratories
Philadelphia, Pa.

Equanil®
(meprobamate)
Wyeth

Professionally posed.

Against these three major pathogens…

Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemolytic Streptococci

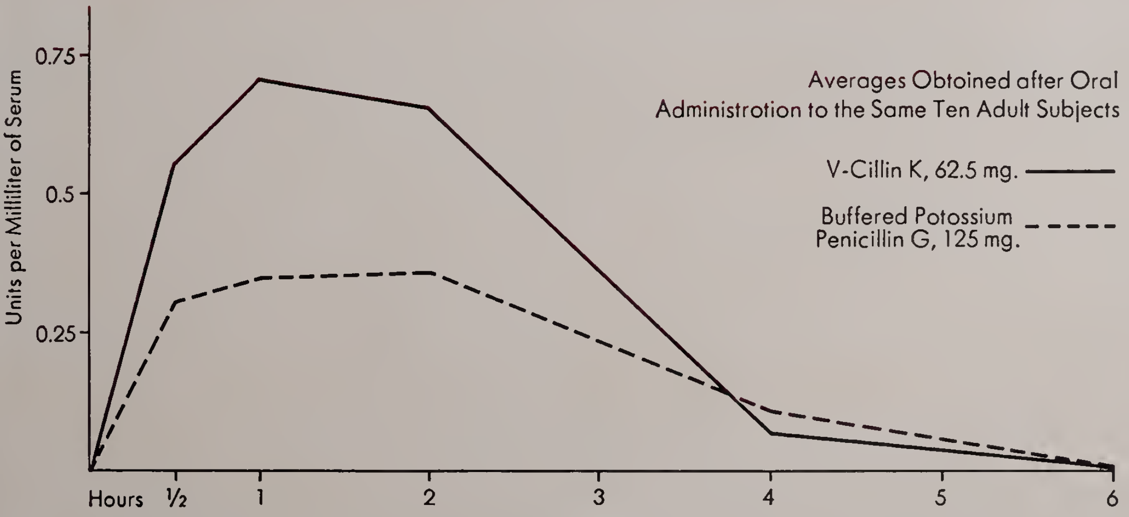
V-Cillin K® provides dependable oral antibacterial activity

because it combines a high degree of in-vitro activity...

Antibiotic	Staph.Aureus (Penicillin-Sensitive) MIC (mcg./ml.) Median	Range	Streptococcus, Group A MIC (mcg./ml.) Median	Range	Diplococcus Pneumoniae MIC (mcg./ml.) Median	Range
Penicillin V	0.02	0.02-0.04	0.02	0.003-0.4	0.01	0.005-0.2
Penicillin G	0.02	0.005-1.6	0.005	0.002-0.2	0.02	0.01-0.1
Methicillin	1.6	0.4-6.3	0.2	0.1-0.4	0.2	0.1-1.6
Oxacillin	0.4	0.1-3.1	0.04	0.02-0.4	0.1	0.04-0.8
Cloxacillin	0.2	0.2-0.8	0.1	0.1-0.8	—	—
Nafcillin	0.4	0.2-0.8	0.04	0.02-0.1	0.02	0.02-0.2
Ampicillin	0.2	0.1-0.8	0.02	0.01-0.04	0.02	0.01-0.04

Adapted from Klein, J. O., and Finland, M.: New England J. Med., 269:1019, 1963.

with high blood levels, even in the presence of food



Adapted from Griffith, R. S., and Black, H. R.: Current Ther. Res., 6:253, 1964.

V-Cillin K® Lilly 700867

Potassium Phenoxymethyl Penicillin

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses

Description: V-Cillin K is the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly). This chemically improved form combines acid stability with immediate solubility and rapid absorption. Higher serum levels are obtained more rapidly with this penicillin than with equal oral doses of penicillin G. The higher serum levels and acid stability of V-Cillin K make it a more dependable penicillin for oral use.

V-Cillin K, Pediatric, is an oral solution of clinically proved V-Cillin K in teaspoon dosage form. When mixed as directed, each 5 cc. (approximately one teaspoonful) will contain 125 mg. (200,000 units) phenoxymethyl penicillin as the potassium salt.

Indications: V-Cillin K has been shown to be effective in the treatment of streptococcus, pneumococcus, and gonococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy and tooth extraction in those patients with a history of rheumatic fever or congenital heart disease.

Contraindication: V-Cillin K should not be administered to a patient with a history of penicillin hypersensitivity.

Warnings: In rare instances, the use of penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin and in those with bronchial asthma or other allergies. Resuscitative drugs should be readily available for emergency administration. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for relief of immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: V-Cillin K should be used cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of pencillin-insensitive organisms. In such cases, its administration should be discontinued, and appropriate measures should be taken.

Adverse Reactions: Although serious allergic reactions are much less common with administration of oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it does possess a significant index of sensitization. The following hypersensitivity reactions associated with the use of penicillin have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: For Tablets V-Cillin K and for V-Cillin K, Pediatric, the usual dosage ranges from 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, the daily dosage may be 50 mg. per Kg. of body weight divided into three doses.

Beta-hemolytic streptococcus infections without associated bacteremia may be treated with 200,000 to 400,0000 units three times a day. Therapy should be continued for a minimum of ten days to prevent development of rheumatic fever and/or other serious complications. Dosage for routine streptococcus prophylaxis in patients with a history of rheumatic fever or congenital heart disease may be 200,000 units once or twice daily. When such patients undergo tonsillectomy, tooth extraction, or other minor surgery, the prophylactic dose should be 500,000 units every six hours given two days prior to surgery and for two days postoperatively. If oral medication is not feasible on the day of surgery, parenteral therapy should be considered. Mild to moderately severe pneumococcus pneumonia has been treated effectively with 250 mg. every six hours.

In staphylococcus infections, 400,000 units or more should be given every six to eight hours in conjunction with indicated surgical procedures.

For gonorrhea in males, 500 mg. (800,000 units) every four hours for three doses may be employed; in females, 500 mg. every four hours for six doses are recommended. Refractory infections generally respond to a second treatment three to four days following completion of the first. Treatment of gonorrhea with severe complications should be individualized, with prolonged and intensive treatment. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving penicillin and monthly serologic tests for a minimum of three months.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), in bottles of 50 and 100; and 250 mg. (400,0000 units) and 500 mg. (800,000 units), in bottles of 24 and 100.

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) per 5 cc. of solution, in 40, 80, and 150-cc.-size packages. [032067]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

700867

The AMBAR SCRAPBOOK of Obesity Oddities

FACT & LEGEND

GALLSTONES HAVE BEEN FOUND IN 60% OF PATIENTS WHO WEIGH MORE THAN 300 POUNDS, 45% HAVE DIABETES, AND 15-TO-20% HAVE HIGH BLOOD PRESSURE.

SOURCE: DUNCAN, G.G.: SCIENCE NEWS LETTER, 83:403 (JUNE 29) 1963.

NAPOLÉON BONAPARTE *LOST THE BATTLE OF WATERLOO BECAUSE HE WAS TOO FAT!*

ACCORDING TO THE NEW YORK TIMES OF APRIL 13, 1890, THE DEFEAT OCCURRED BECAUSE HE FAILED TO CHECK HIS INTELLIGENCE INFORMATION. "IT WAS A MATTER OF MERE INDOLENCE AND THIS INDOLENCE WAS CAUSED BY FAT."

SOURCE: JAMA 186:65 (OCT. 5) 1963.

THE BOOK ***"PRAY YOUR WEIGHT AWAY"*** URGES READERS TO "ASK GOD TO HELP YOU LIKE EXERCISE" FOR 15 MINUTES A DAY.

SOURCE: REV. C.W. SHEDD: NEW YORK, LIPPINCOTT, 1958.

DIET DROPOUTS ACCORDING TO DRS. SHIPMAN AND PLESSET "APPARENTLY NO DIETER SUCCEEDS WHO IS VERY ANXIOUS OR DEPRESSED."* THE AMBAR FORMULA PROVIDES **METHAMPHETAMINE** TO HELP **ELEVATE** THE **MOOD** AND **PHENOBARBITAL** TO HELP REDUCE **ANXIETY.**

**SOURCE: ARCHIVES OF GENERAL PSYCHIATRY 8:26 (JUNE 1963).*

CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

AMBAR #2 EXTENTABS®

methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
(Warning: may be habit forming).

One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

A. H. ROBINS COMPANY,
RICHMOND, VA. 23220

A-H-ROBINS

LOMOTIL® tablets/liquid controls diarrhea

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . .2.5 mg.
(Warning: May be habit forming)
atropine sulfate . . . . .0.025 mg.

In six published studies[1-6] detailed results are given on the use of Lomotil in 111 patients with chronic ulcerative colitis. They show that Lomotil gave satisfactory to "excellent" control of diarrhea in more than two-thirds of these patients. As the disorder advances and destroys bowel musculature, the motility-lowering action of Lomotil, understandably, has less effect.

The successful use of Lomotil in a disorder as exceedingly difficult to treat as moderate ulcerative colitis emphasizes again its unsurpassed antidiarrheal effectiveness in these more common conditions:

- **Gastroenteritis**
- **Acute infections**
- **Spastic colon**
- **Drug induced diarrhea**
- **Functional hypermotility**

For correct therapeutic effect
Rx correct therapeutic dosage

Dosage: The recommended initial daily dosages, given in divided doses until diarrhea is controlled, are:

Children: Total Daily Dosage
3-6 mo. . . ½ tsp.*t.i.d. (3 mg.)
6-12 mo. . ½ tsp. q.i.d. (4 mg.)
1-2 yr. . . . ½ tsp. 5 times daily (5 mg.)
2-5 yr. . . . 1 tsp. t.i.d. (6 mg.)
5-8 yr. . . . 1 tsp. q.i.d. (8 mg.)
8-12 yr. . . 1 tsp. 5 times daily (10 mg.)
Adults: 2 tsp. 5 times daily (20 mg.)
or 2 tablets q.i.d.

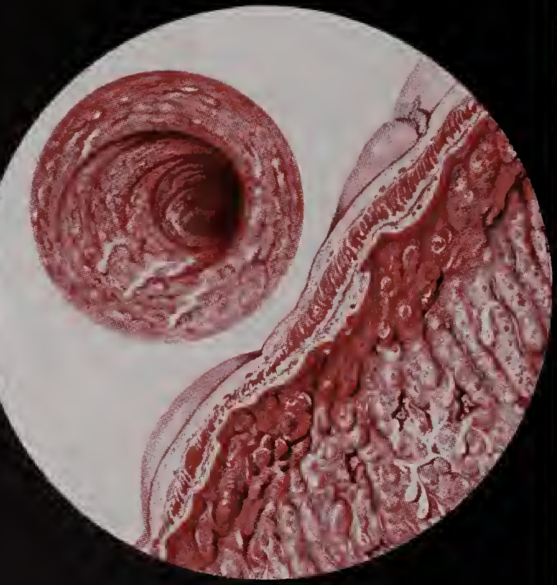
*Based on 4 cc. per teaspoonful.
Maintenance dosage may be as low as one-fourth the initial daily dosage.

Precautions: Lomotil is a federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded, and medication should be kept out of reach of children. Should accidental overdosage occur signs may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and tachycardia. Lomotil should be used with caution in patients with impaired liver function or those taking addicting drugs or barbiturates.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of the extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

even in ulcerative colitis...

characterized by:
— diarrhea, cramps, tenesmus
— bloody, mucoid, purulent stools



1. Barowsky, H., and Schwartz, S. A.: J.A.M.A. *180:*1058-1061 (June 23) 1962. 2. Cayer, D., and Sohmer, M. F.: N. Carolina Med. J. 22:600-604 (Dec.) 1961. 3. Hock, C. W.: J. Med. Ass. Georgia *50:*485-488 (Oct.) 1961. 4. Van Derstappen, G., and Vandenbroucke, G.: Med. Klin. *56:*962-964 (June 2) 1961. 5. Merlo, M., and Brown, C. H.: Amer. J. Gastroent. *34:*625-630 (Dec.) 1960. 6. Weingarten, B.; Weiss, J., and Simon, M.: Amer. J. Gastroent. *35:*628-633 (June) 1961.

SEARLE *Research in the Service of Medicine*

Far Worse than Riots

Riot deaths were given prominent place in newspaper headlines during July and August. Fewer than 100 were killed. *But during the same two months more than 8,000 were killed on the highways.*[1] Property damage in one city, well illustrated in newspapers and with vivid pictures on television, was estimated at $500 million. *July and August property damage on the highways was at least $1.6 billion.*[1] Where is our sense of proportion? Doesn't anyone care?

Columnists, editorialists, and a number of politicians have raised a great clamour for federal control of firearms because they are used in murders, but murder on the highway is unconcernedly overlooked. Why are we so callous?

This is a disease of major proportion. It is not about to be cured and cure will not come about until causes are determined and appropriate remedies are applied. The tragic highway problem is a medical problem.

The most reasonable approach so far has been made in Adelaide, South Australia.[2] Somewhat after the manner of investigation employed by Moseley in this country, but not so elaborately, the Adelaide investigators studied cases in depth. The investigating team consisted of a physician and an engineer. They were at the scene within 15 or 20 minutes and made a rapid but careful examination.

In pedestrian accidents they observed that pedestrians and drivers ferquently failed to see each other. There were many engineering deficiencies. Many pedestrians were run under, rather than run over, and injuries were influenced by vehicle configuration.

Study of bicycle and motorcycle accidents revealed that two-wheeled vehicles are not readily seen by automobile drivers. A number of accidents occurred at night when cyclists were overtaken because not seen. Head injuries occurred because the helmets used did not provide sufficient protection.

In studying car collisions, the investigators were not able to conduct tear-down inspection and, therefore, could not report satisfactorily on the factor of equipment failure. Most accidents were at intersections and involved end to side impact. In front impact the passenger was injured more frequently than the driver. Side impacts cause injury to the person sitting on the side struck. Steering wheel, instrument panel, rear vision mirror and the windshield all caused injury. Door opening and ejection were associated with the more severe injuries. Tests for alcohol were not included but it was estimated that at least 10 per cent had obviously been drinking. Fewer than 0.5 per cent of drivers had pre-existing disease that could have been detected by physical examination.

Strikingly absent in the report was any reference to speed as being a cause of accidents. This is a refreshing departure from the almost universal incrimination of speed by many well-meaning persons in this country. Continued citing of speed as a cause has done more to interfere with scientific investigation of traffic accidents than any other single factor. Speed does not cause accidents. There are always errors or failures, usually several, in highway collisions.

The Adelaide study made a number of recommendations, all based on observed fact. This is the scientific method. This seems to be the only way to make any progress in control of the highway accident problem. Crackdown campaigns, scare techniques, exhortations to "drive safely" have all failed. They seem to work for a while but people soon start killing each other again and the annual injury-death-property-damage figures keep going up. But the killings are not all due to driver error as so many like to believe. There are engineering deficiencies and equipment failure too. The psychologic factors are not all endogenous.

The method employed in Adelaide offers an intelligent way to measure the importance of the numerous factors involved. It is a medical approach. First determine the cause—then apply the obvious remedies. If doors fly open and people fly out, improve the locks. If side panels fail on impact, reinforce them. If cyclists are not visible at night, have them use bigger and brighter lights. If intersections are dangerous, revise them.

And, by all means, if alcohol turns an otherwise competent driver into a killer, keep him off the road. It can be done, but it will not be done until the public is sufficiently aroused and adequate legislation is enacted. This is one situation in which good medical practice demands that political pressure be brought to bear on a problem of great importance. It can be done by responsible medical leadership.

We do not have to kill 52,000 people on our highways every year. And we do not have to let headlines about riot deaths destroy our sense of proportion. When will we have enough interest to stop the killings on our highways? ■

H. L. H.

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Fatigue Contracture of Skelatal Muscle

HENRY H. DIXON, M.D. / MICHAEL O'HARA, B.S., Portland, Oregon

R. D. PETERSON, Ph. D., New Orleans, Louisiana

Rapidly repeated electric stimulation of isolated frog and rat muscle reduces organic phospate compounds, increases inorganic phosphate, and increases potential of electric output of muscle as recorded in myograms. These changes are well marked when the muscle is in state of myostatic contracture. Similar changes have been observed in patients suffering from fatigue, tension, or traumatic muscle spasm.

Isolated muscle from the frog will develop contracture when directly stimulated at the rate of 40 impulses per minute. It will also develop contracture from chemical change, temperature change, and from trauma. Accompanying contracture, definite chemical alterations occur. In 1928, Dixon, Davenport, and Ranson, measured the phosphate fractions in muscle and showed that a sharp reduction in phosphocreatine always accompanied the change in physical state.[1]

Contracture in mammalian muscle may be produced by rapid stimulation; interruption of cortical inhibitor fibers; chemical agents, such as tetanus toxin; inaction (casting); and trauma. In each case the chemical changes occurring in the phosphate fractions are similar. If the contracture is continued over a period of time it will become a fixed state, either in extension or flexion, defined by Ranson as myostatic contracture.[2-4]

With improvement in the sensitivity of the myograph it became possible to measure variations in electrical activity of the muscle in different physical states. It was evident that some correlation existed between the physical state, the metabolic chemistry, and the myographic recording.

This investigation deals with the comparative evaluation of myography, chemistry, and physical performance of the muscle.

procedure for myography and kymography of frog muscle

Frogs were decapitated. One gastrocnemius (control) was dissected out immediately and plunged into dry ice and alcohol slush. The controlateral gastrocnemius was then dissected so that the muscle was left attached to the femur. Thread was tied to the tendon of the muscle and the femur cleaned of other musculature. The muscle was bathed in frog Ringer's solution to maintain its physiologic integrity. The femur was mounted in a clamp and the first myogram taken before stimulation. With the thread tied to the kymograph arm, the muscle was stimulated to contracture while recording on the kymograph. A Myo-Pulse, battery powered stimulator, which produced 58 pulses per minute, or approximately 1 pulse per second, was used. The stimulation time varied somewhat, which probably accounts for the variation in reduction of adenosine triphosphate (ATP) and phosphocreatine. After stimulation, the second myographic recording was taken, and the muscle was then frozen immediately in dry ice and alcohol. The tissues were wrapped in aluminium foil and stored in dry ice until the time of analysis.

procedure for myography and kymography of rat muscle

The rats used in our experiments were 230-250 g females. Surgical anesthesia with pentobarbitol was maintained throughout the experiment. The gastrocnemius and soleus were exposed by incising the skin and the superficial adductors. The muscle was bathed in normal saline from time to time. The first myogram was taken with the muscle exposed but intact. Thread was then tied around the common tendon and the distal end freed from its insertion on the heel. The preparation was mounted in the clamp and attached to the kymograph arm as shown in Figure 1. While recording on the kymograph the muscle was stimulated to contracture by a stimulator with frequency of 2 pulses per second, pulse width of 0.1 second, and voltage about 30. Following stimulation to contracture, the second myographic picture was taken. The muscle was then quickly dissected free and plunged into dry ice-alcohol slush. The gastrocnemius and soleus on the other leg were

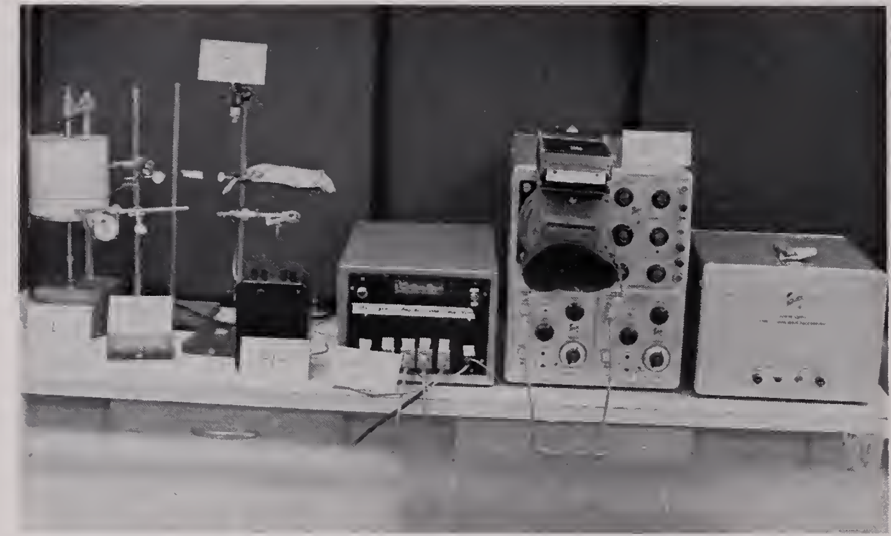


Figure 1: 1. Standard kymograph—calibrated chart; 2. Angel-writing pen attached to muscle tendon—10 g load; 3. Adjustable myograph with the bi-polar leads; 4.Stimulation from a 400 volt faradic machine with a timed interrupter; 5. Westcon amplifier; 6. Tektronic oscilloscope equiped with Polaroid Land camera.

dissected out as carefully and quickly as possible and frozen to serve as controls. Each was wrapped and preserved as above. The frozen muscle was powdered in a cold box (-55C) and the phosphate fractions determined as previously described.[5]

results

Tracings show that slowing of the relaxation phase occurs after a period of stimulation (stimulus rate in frog muscle—58 pulses per minute). The slowing increases as the stimulation continues. The myograph records an average of 2.5 mm at onset of stimulation. As contracture develops and the relaxation phase becomes slower, the sweep widens in inverse ratio, as indicated in Figure 2. Increase in potential begins with the slowing of the relaxation phase and increase continues as the slowing continues.

In the mammal (rat), stimulation under 100 pulses per minute will not produce contracture in any reasonable time. Figure 2 shows tracings made when the gastrocnemius and soleus muscles were stimulated at the rate of 120 pulses per minute, and stimulus was applied directly to the muscle of the anesthetized animal. A myographic tracing was taken prior to stimulation and later, after slowing occurred. Data on the phosphate fractions are presented in Figure 3 and Table 1. When the contracture is complete and the pool of phosphocreatine exhausted, the myograph shows rapid, low pitched firing. The muscle is then in myostatic contracture.

We conclude that: as the available reservoir of muscle energy is decreased, the relaxation phase becomes progressively slowed. This is accompanied by increased potential in the electric output of the muscle. With exhaustion of the energy reserve, the muscle becomes contracted and the myographic output is rapid and of low, irregular voltage. The myograph proves to be a useful instrument in determining both the physical state and the energy level of muscle, and provides a means of estimating energy reserves in muscles while leaving the muscle intact.

The data in this paper are on frog and rat muscles. Values of phosphate fractions for human muscle, obtained by biopsy or at the site of operative incision, are somewhat lower but are consistent.[6]

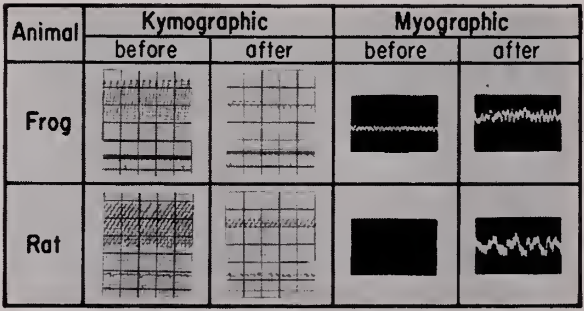


Figure 2. Myostatic contracture in frog and rat muscle after repeated stimulation. Amplitude of contraction is markedly reduced but the myogram shows increased potential of electric output of the muscle.

Table 1

High Energy Phosphate Fractions[1] in Control and Electrically Stimulated Muscle from Rats and Frogs

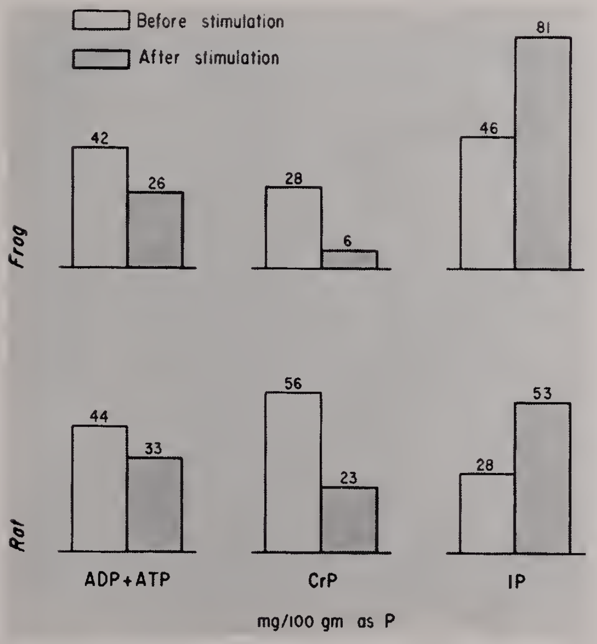
Frog	Number of animals used	Adenosine diphosphate + Adenosine triphosphate	phosphocreatine	Inorganic phosphate
Control	6	42 ± 1[2]	28 ± 2	46 ± 2
Stimulated	6	26 ± 2	6 ± 1	81 ± 5
P[2]—Control vs. stimulated		.005	.005	.005
Rat				
Control	5	44 ± 4	56 ± 7	28 ± 3
Stimulated	5	33 ± 5	23 ± 7	53 ± 7
P—Control vs stimulated		.01	.005	.005

1 Milligrams per 100 gms P.
2 Standard error of the mean.

Christiansen has pointed out that voluntary activity in the human and in other mammals will not decrease the muscle energy sufficiently to produce delay in relaxation time, nor will it produce the fatigue firing seen after rapid stimulation applied directly to the muscle.[7]

We see this reduction, in the human, when there is protracted tension; when there are interferences in muscle function and circulation; and when there is strain or injury. In acute tension the normal cortical inhibition, which would protect the muscle from fatigue, is probably rendered inoperative by the intensity of the interference of somatic emotional function. We find, in agitated, depressed people, lowered phosphocreatine, increased inorganic phosphate, and myographic findings characteristic of fatigue.[6] The physical performance shows slowing in the relaxation phase.

In neck spasm due to trauma (whiplash) the physical state shows marked slowing of the relaxation phase, and the myographic recording shows the increased ampitude seen in fatigue spasm or, in extreme cases, in myostatic contracture. In prolonged episodes of rheumatoid arthritis the flexor muscles show the output of fatigue spasm, the extensors, the output of myostatic contracture. Myographic records from several hundred cases of tension headache show increased myographic firing in the upper third of the trapezius, and there is often a similar firing in the temporal, or other muscles served by the motor fibers of the cranial nerves and by the reticulospinal flow.



Adenosine diphosphate + Adenosine triphosphate	Phosphocreatine mg/100 g as P	Inorganic phosphate

Figure 3. Depletion of organic phosphate compounds in rat and frog muscle after stimulation.

conclusion

Reduction of fatigue spasm or myostatic contracture can be accomplished by the use of compounds which increase the high energy phosphates, and by mild, rhythmic, muscle movement. With recovery of normal physical response myographic tracings are restored to normal. We believe that in conditions where there is extreme reduction of muscular energy (anxiety states—

tension headaches, muscular spasms, rheumatoid disease) the myographic evaluation of muscular energy can contribute to diagnosis, can assist in determining methods of therapy and can aid in the evaluation of therapeutic agents. ■

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abstracto

En miogramas se ha podido registrar que la estimulación rápida y repetida de músculos aislados de rana y rata, reduce los compuestos orgánicos de fosfato, aumenta el fosfato inorgánico, y aumenta el potencial de la corriente de acción del músculo. Estos cambios son bien patentes cuando el músculo está en estado de contractura miostática. Cambios similares se han observado en pacientes bajo los efectos de fatiga, tensión o espasmo muscular traumático.

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BURDEN OF DEBT

> *Government at its several levels now skims off by taxation more than 40 per cent of our total national income. In spite of this, we are steadily increasing our burden of debt. Our Federal debt is at an all-time high and increases each year. In addition, there are hidden obligations accumulated under the social security and government retirement systems, and as guarantees of mortgages and other indebtedness, which amount to hundreds of billions, the total of central government liabilities alone having been estimated recently at one and a half trillion dollars, that is, $1,500 billions, or $7,500 for every man, woman, and child in the nation!*
>
> **Ben Moreel, in The Freeman, July 1967**

Tension Headache

HENRY H. DIXON, M.D./HERMAN A. DICKEL, M.D., Portland, Oregon

Electromyography indicates that tension headache is accompanied by fatigue contracture of cranio-cervical muscles. Trauma can produce contractures that may be self-perpetuating but emotional stimuli operate through the hypothalamus. In either event, symptoms can be relieved, not by stretching, but by electric stimulation, using current of low amperage with impulse frequency less than 60 per minute.

How many patients does the average doctor see every year, who come into the office complaining of tight, band-like feelings of pressure in the back of the neck and head, band-like feelings around the head, pain in, and in back of the eyes, difficulty in visual concentration, disturbances of equilibrium, sharp pains at times in the temple over the orbits, and a rigid group of muscles running between the shoulders to the head, accompanied by burning sensation in the neck? This occurs frequently, and physicians have often heard such patients state, "I think I have a migraine".

a perfectionist reaction

The tension headache is to be differentiated from migraine, sinus headaches and those originating from toxic edema or intracranial pressure. It is a part of the anxiety tension syndrome occurring in patients with characteristic background, such as, the intelligent, perceptive individual, who has acquired one or a variety of perfectionistic approaches, the feeling that he should behave in a better or more guarded and careful way. Thus when he is confronted with intangibles in his environment, and those produced by his imaginative ability, he feels he must immediately control the sum total of the uncertainties that his environment, and his imagination present. In our culture we are taught that control means going on guard, but we know that if the individual continues to do this his tension becomes a habit.

With extension of the time the muscles are on guard, there is additional inflow of response from the tense muscles to the control center of the brain, causing greater physiologic stress. The real and measurable symptoms are dilated pupils, with difficulty in vision and depth perception, tight neck muscles, tight throat, rapid heart rate, variation of respiratory and bowel function, urinary frequency, and vasomotor, pilomotor and secretory disturbances. At first the patient reacts to the intangibles in his environment, and those created by his imaginative ability, then he reacts to the distress that is the product of his tension.

When the patient is tense enough to be aware of these feeling tone disturbances and emotions, there is interference with perception and association. He then loses the ability to enjoy the depth and color of his surroundings and, consequently, fails to react adequately to them.

In those with tension headache, there is history of high awareness of uncertainty, perfectionistic striving and the generalized symptoms of somatic, visceral, and feeling tone disturbances. Urgency, irritability and apprehension are prominent. Observation of the patient should yield these findings: dilated pupils, stress in facial expression, guard in the neck and shoulders, moist or cold hands, rapid or variable pulse and high chest breathing. The combination of visceral, somatic, and feeling tone disturbances gives the picture of one ready for battle or take off.

characteristic electromyogram

The electromyographic check shows a general increase in all muscle output and frequency of firing, but in the muscles served by the motor roots of the cranial nerves, and the first, second and third cervical nerves, there is increased amplitude and increased rate of firing, as one observes in a tense, fatigued muscle. If the patient has sharp pain in the supra-orbital or temporal area the myogram from muscles in these areas will often show the high pitched firing of stretched, fatigued muscle. When the tension headache is occasional, the records show variation in amplitude, but when the headache is constant or long extended, we have the rapid firing seen in the fatigued muscle. The occasional headache may yield to compounds that have tranquilizing effect, but if it is constant and there is fatigue firing, these compounds give little relief.

Points in Differential Diagnosis of Headache

TENSION	MIGRAINE	TOXIC	SINUS	INTRACRANIAL PRESSURE
1. Part of the tension syndrome.	1. Visual scotoma preceding pain.	1. Feeling of pressure and pain.	1. Localized pain and pressure.	1. Optic disc shows edema if the pressure is adequate.
2. Objective and subjective tight neck muscles.	2. Feelings of edginess.	2. Feelings of edginess.	2. Congestion nasal area.	2. Irritable.
3. Feelings of anxiety and tension.	3. Sharp sensitivity to sound, light and movement.	3. Sensitive to sound, movement, noise.	3. Irritable, sound and light sensitive.	3. Sensitive to sound, light and noise.
4. No marked sensitivity to sound, light and noise; visible guard in neck region.	4. Nausea or emesis, or both.	4. Nausea or emesis, or both.	4. The symptoms of visceral and somatic nature are not varied as in the tension state.	4. Myograph — in intracranial pressure, the firing is caused by central irritation.
5. Visual disturbances, difficulty in depth perception.	5. Subsequent soreness and aches.	5. Varying soreness.	5. Soreness, ache constant.	5. When there is increased intracranial pressure it is often accompanied by rise in spinal pressure.
6. Impaired perception of color depth and response to external perception.	6. Improved by oxygen.	6. Myograph — when the irritation is due to edema in central nervous system there is an irritable burst of firing and not constant firing seen in fatigue spasm of the neck.	6. No improvement on oxygen.	
7. Inability to relax.	7. Myograph — when the irritation is due to edema in central nervous system there is an irritable burst of firing and not constant firing seen in fatigue spasm of the neck.	7. If severe, increased spinal pressure and possible chemical changes in spinal fluid.	7. Myograph — no change.	
8. Not improved by oxygen.	8. No changes in spinal fluid pressure or content, no optic disc change.	8. Optic disc shows change if adequate pressure.	8. X-ray will show sinus involved.	
9. Myograph — rapid high frequency firing of neck muscles and often of temporal and supra-orbital muscles.			9. No optic disc change.	

neuromuscular mechanism

For many years we have been aware that mammals have a nervous system mechanism that can prepare the individual for battle or escape by increasing total capability. It comes into play when there is need to fight or escape, or when there is an unevaluated situation that may demand either response. When aware of potential danger the animal braces, the pupils dilate, the neck becomes rigid, the heart rate increases, the intestinal tract shuts off secretion and digestive activity, and the breathing becomes rapid. The functions used in fight or flight are prepared for immediate action, and bodily functions related to digestion, repair and storage are suspended. Thus the organism is ready to spend lavishly from reserve to survive. Cannon initially described these responses as due to rage, fear and uncertainty; however, we can remove the cortical areas in a mesencephalic section and they continue to occur, if the animal is pushed or crowded. With muscle guard or tension we have the somatic pattern of readiness for combat. We also have feeling tone limited to urgency, irritability, and anxiousness. When the generalized skeletal muscle system is on guard we have the total visceral, somatic and feeling tone related to awareness of danger.

Tension headache is actually one of the symptoms of the anxiety tension state. Rigid tightness of the neck and disturbance of the head, neck, eye reflex system are due to overflow from guarded muscles of the body. The neck muscles tighten most when the individual is alerted by an alarm mechanism. They maintain tightness until the other muscles have been released for some time. Thus muscles in the neck are tense for longer periods than are other muscles. Twenty to 30 per cent reduction in the energy of these muscles, as a result of being overly tense, causes a greatly reduced speed in the relaxation phase and, as a consequence, tension fatigue spasm results.

Years ago Ranson outlined the possible connections in the nervous system that would produce these effects. His diagram (Figure 1), was remarkably correct in view of present neuroanatomical findings.

With the existence of generalized muscle guard, inflow from the skeletal muscle causes alteration in hypothalamic control, producing stress symptoms. In head and neck regions all of the muscles served by the motor roots of the cranial nerves show increase in firing that lasts for some time after the tension disappears. This spread includes spinal nerves 1 to 11. Thus the disturbance of head-neck-eye balance. Because of the constancy of overflow into these muscles the disturbances of head, neck, and eye balance produce delay in relaxation from fatigue spasm—resulting in the tension-fatigue headache.

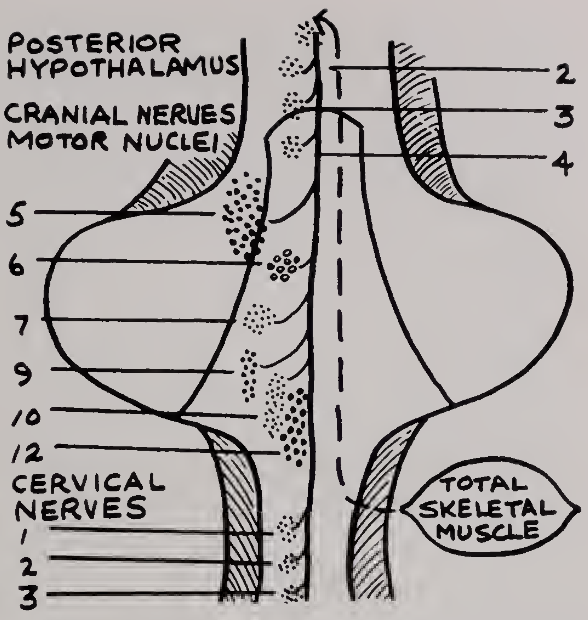

Figure 1. Diagram showing the possible connections of hypothalamic overflow to the motor nuclei of the cranial nerves and the first, second and third cervical nerves. Potential danger by putting the individual on guard, causes tightening of total skelatal musculature. Impulses mediated through hypothalamic nuclei create tension and fatigue in neck and face muscles via cranial and cervial nerves.

treatment

In treating the patient we teach him that control should be relaxation not tension and that the fatigued muscle will not stretch. Experimental work with the myograph and chemical analysis indicates that fatigued muscle restores its energy in light, free motion at a rate below 60 contractions per minute. Fatigue spasm can be reduced by electric stimulation. The device used should deliver a fraction of a milliampere, at around 100 volts, in a diphasic wave, at rate of 40 to 60 impulses per minute. Mild muscular relaxants, mephenesin, meprobamate, and diaspan, are temporarily useful. The tension headache can be permanently relieved by teaching tension control and by restoring energy to the muscle that is in fatigue spasm.

Examination of the patient with a severe neck spasm produced by a sudden forward—backward movement of the head, often elicits no evidence of root injury but does reveal muscle trauma.

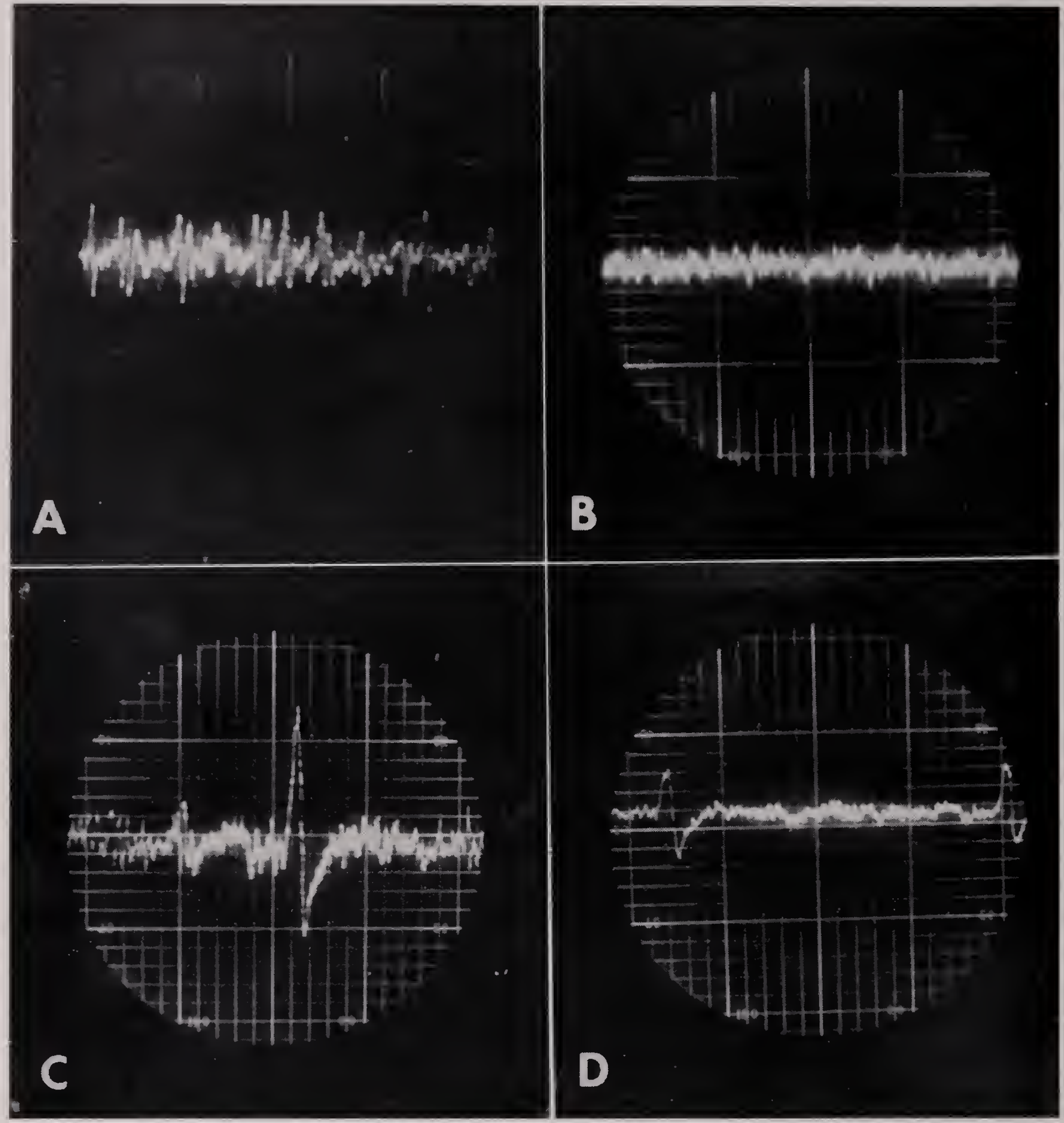

Figure 2. A, myogram of right upper trapezius of patient with acute tension headache. B, myogram repeated after relaxation and myopulse stimulation. C, myogram of left upper trapezius of patient after whip-lash injury D, myogram repeated after relaxation and myopulse stimulation.

The strain may leave a fatigue spasm that will continue indefinitely. In 70 per cent of the "whiplash" cases we have checked, there has been no root injury. But, due to emotional distress and physical pain, the patient builds up adequate tension to keep the neck and some of the facial muscles in fatigue spasm. We have found that any attempt to reduce this spasm by stretching tends to increase it, but it can be relieved with conditioned relaxation, and light myopulse exercise to restore energy and thus flexibility. ■

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abstracto

La eletromiografía muestra que la cefalea de tensión se acompana de fatiga de los músculos craniocervicales por contractura de los mismos. Las contracturas tienen dos causas. Trauma puede producir contracturas capaces de reactivarse así mismas, pero estimulos emocionales operan a través del hipotálamo. En ambas circunstancias los síntomas pueden desaparecer, no por estiramiento muscular, sino por estimulación eléctrica, usando corrientes de bajo amperaje con una frecuencia menor de 60 impulsos por minuto.

Asbestos — An Environmental Health Hazard

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T. F. MANCUSO, M.D., Pittsburgh, Pennsylvania

Carcinoma of the lung, other respiratory diseases, cardiac complications, pleural and peritoneal mesotheliomas, and carcinoma of the rectum have been attributed to asbestos. The latent period may be from 30 to 40 years and disease may follow non-occupational exposure. Asbestos workers, however, have the highest incidence of disease due to asbestos, not necessarily due to exposure at the place employed when disease is discovered. Diseases due to exposure of those employed in shipyards and other war industries during World War II are now appearing and will increase. Physicians, employers, and industrial insurance executives should share interest in the problems created.

Within recent years, there has been a rapidly accumulating body of data on the significance of asbestos and the potential health problems associated with its extensive production and use. The importance of these problems and the need for further study were exemplified by the two international meetings held in 1964 on the Biological Effects of Asbestos and the Recommendations of the Union Internationale Contre Le Cancer (UICC) Working Group on Asbestos and Cancer.[1,2] Since that time, investigators from various countries have continued and renewed their investigations with animal experimentation and epidemiologic studies, which have supported and added to the previous observation of a strong association between asbestos and malignancy. It is widely recognized, however, that a great many questions have been raised for which there are no known answers and substantial sustained research will be required to resolve them through a coordinated approach of clinicians, radiologists, and scientists of various disciplines, such as epidemiology, pathology and experimental pathology, physics, and chemistry.

It is our objective, therefore, to encourage investigations in the Northwest on the biological effects of asbestos. The purpose of this paper is to further this objective by directing the attention of the physicians and scientists of the Northwest to: 1. The nature of the asbestos problem which is concerned with the increasing importance of asbestos in the occupational and non-occupational environment, the long latent period and the serious multiple biological effects. 2. The diagnostic and workmen's compensation problems associated with the study of asbestos as illustrated in the presentation of several case histories.

The disease and biological effects that have been recognized as directly associated with exposure to asbestos up to the present time are: bronchiectasis, asbestosis, chronic pneumonitis, emphysema, chronic pleuritis, pleural plaques, cor pulmonale, carcinoma of the lung, diffuse mesothelial tumors of the pleura and peritoneum, gastrointestinal tumors and possibly ovarian tumors..[3-14]

It is not our intention to review the literature, but rather briefly to comment on several of these diseases in relation to the case studies presented. The four cases selected from this geographic area are representative of our observations and demonstrate: 1. asbestosis with pulmonary emphysema and cor pulmonale, 2. asbestosis with lung cancer, 3. mesothelioma and 4. rectal carcinoma observed in asbestos workers or in those whose occupation resulted in exposure to asbestos.

nature of the asbestos problem

There are four major types of asbestos: amosite, chrysotile, crocidolite and anthophyllite, each with different physical properties, chemical composition and commercial applications.[15] Chrysotile constitutes 90 per cent of the world's output of asbestos and the major producer and source of chrysotile is Canada. Similarly, it is estimated that 95 per cent of the asbestos used in the U.S. has been chrysotile from Canada. Extent of production and consumption of asbestos is important, in terms of the time periods involved and the tonnage, because of the markedly delayed latent period, which may extend from 30 to 40 years or more for certain malignancies associated with asbestos exposure. The potential health hazards involved, therefore, in subsequent intervals of time is a direct reflection of the tonnage consumed in previous time periods.

In 1935, 501 tons of amosite and crocidolite were imported into the U.S. and in 1962, 29,837 tons. However, the total consumption of all types of asbestos in the U.S. in 1962 was 726,268 tons. with over 3,000 separate uses of asbestos being reported.[15,16] Since the malignancies now being recognized are undoubtedly related to the consumption and use of asbestos in a much earlier time period, the health problem in the future may be very extensive and serious.

In addition to workman exposure there is the problem of environmental and non-occupational exposure to asbestos. Wagner, who originally established the relationship of diffuse mesothelioma to asbestos exposure, initially observed in South Africa the non-occupational nature of some of the cases. In a number of mesotheliomas, exposure to asbestos was traced to childhood and to patients who had not actually worked with asbestos but had lived in the vicinity of the mines.[17] Newhouse reported, in her series of cases of mesotheliomas in London, some whose exposure was traced to living within a half mile of an asbestos factory and other cases whose exposure was to dust brought home by relatives working with asbestos.[18] Kiviluoto has found extensive parietal pleural calcifications in x-ray studies of inhabitants surrounding Finnish asbestos mines.[19] These plaques are similar to those observed in asbestos workers. Thomson has directed attention to asbestos as a probable atmospheric pollutant in the residential environment and to the question whether this poses an additional cancer risk for the urban population. Studies have been conducted on asbestos bodies in the lungs of consecutive autopsies. Although they cannot be compared because of difference in methods, a higher than expected percentage of asbestos bodies was recorded (Capetown, South Africa; Miami, Florida, and Pittsburgh, Pa.).[20,21] Medical significance of this observation of asbestos bodies in the general population has not been determined.

The problems of industrial environment are, however, of particular interest to us. We are concerned with the nature and extent of occupational exposure to asbestos and the problems of recognition, diagnosis and prevention of associated diseases.

In recent years, lung cancer and pleural and peritoneal mesothelioma have been more adequately recognized.[1-7] We are interested in the application of these observations and other indications that have appeared in the literature, to study of the industrial population of the Northwest. We are, therefore, now expressing our concern with the potential occupational health problems in the Northwest because of the shipbuilding and repairing, construction, and related industries that developed during the war years in which asbestos as an insulating material and asbestos containing products were used very extensively. Larson, in the Northwest, pioneered in observations pertaining to asbestosis among shipyard workers and has directed attention to this important problem.[22] Dunn, in his study on the West Coast, reported a high rate of respiratory carcinoma among asbestos workers.[23]

Related to this is the observation that limited, intermittent exposure such as occurs in asbestos insulation workers, is sufficient to produce high rates of lung cancer, pleural and peritoneal mesothelioma and gastrointestinal tumors. It is believed that the minimum requirements of the delayed latent period will now have been met and that large numbers of cases of malignancies are beginning to occur and that they will substantially increase in the near future. Unless the medical profession is aware of the possible diseases and the long latent period following exposure to asbestos, origin of such cases will pass unrecognized.

The difficulties, problems, and need for the further study of the biological effects of asbestos have been excellently specified in the UICC report, which places a major emphasis on the considerations for pathologists and experimental pathologists and the contributions they may make in studying the pathologic manifestations and mechanisms involved. We should like to cite the recommendations pertaining to the proposal for pathology reference panels which may serve as a basis for consideration:

> It is recommended that central consultation and reference panels be set up on regional, national and international levels. These panels will: A. Assist in establishing standards for pathological classification of asbestosis. B. Serve as consultation centers for diagnosis of mesotheliomas and other tumors associated with exposure to asbestos. C. Serve as general exchange of pathological material related to asbestosis and its associated tumors.

An International panel and a U.S. panel have already been established and regional panels in the U.S. are now being proposed. We should like to express our interest in such a regional reference panel in the Northwest as an important step in the recognition of the diseases associated with asbestos exposure.

pulmonary fibrosis

Information about the prevalence of asbestosis in the industrial population is difficult to obtain because the various population groups exposed to asbestos and the nature of their experience have not been identified or studied in the Northwest. Consequently, we have no accurate data on the extent of the problem. There have been, however, certain observations in the literature on asbestos that may have general applicability and may serve as the basis for some interpretations in our geographic area.

Selikoff, in his study and examination of 1,117 insulation workers, emphasized and demonstrated the importance of the interval of time from initial exposure and the date of examination, as a factor in the detection and recognition of asbestosis. Using only the criterion of radiologic evidence of asbestos, he found percentages increasing with time interval between exposure and examination.[24]

Asbestos bodies are important as indication of previous exposure to asbestos dust and not as evidence of asbestosis. Thomson has emphasized that the term *asbestosis body* is not justified and should be discarded because asbestos bodies may occur in lungs that show no pulmonary asbestosis.[20] Although the sputum may be checked for asbestos bodies, as an indication of exposure, their presence does not yield information on degree of exposure. The suggested methods of identifying and studying asbestos bodies in the lung tissue and sputum have been reported in the UICC report.[2] Meurman believes, however, that a more accurate count of asbestos bodies may be obtained from histologic sections rather than from smears.[25]

Pleural calcifications, primarily of the parietal pleura, have been commonly observed and bilateral pleural calcification has been generally concluded to be directly associated with asbestosis. Consequently, pleural calcifications may serve as an index of previous asbestos exposure and lead to discovery and recognition of cases of asbestosis. The suggested roentgenologic procedure is to include a second posterior anterior film taken with slightly increased penetrating technique, and the use of oblique projections.[24-26]

Serial chest x-rays offer perhaps the earliest visible signs of disease. The need for standardized radiologic classification of asbestos has been well recognized and an international system of classification is now under consideration.[2,26]

Although it is, of course, essential to recognize asbestosis and its related findings, it is even more important to detect early damage to the lungs, if we are to lessen or prevent the pathologic effects and disability from exposure to asbestos. Lung function studies may be the approach that should be more wisely used in industrial observations. There is evident lack of correlation between radiologic appearance and functional capacity of individuals with asbestosis. Hunt has confirmed the finding of others that asbestosis can be detected before it shows on x-ray film and has demonstrated the value of pulmonary function tests for pre-employment examinations and continued medical surveillance.[27]

CASE REPORT

A white male, age 55, began work as a farmer, worked as a truck driver and became an asbestos mechanic at a shipyard from 1943 to 1946. When employed by an insulating company in 1948, his chest x-ray showed emphysematous bullae and partial ground-glass calcification of both basal lobes. In October, 1950, he first consulted a physician for intermittent shortness of breath. He developed exertional dyspnea with cyanosis in the spring of 1951. In 1952-1953, there was progressive dyspnea and cyanosis. A series of chest x-rays, 1948-1952, was compatible with diagnosis of pulmonary fibrosis with associated emphysema and cor pulmonale. The fibrosis and emphysema were detectable on the 1948 film and subsequent changes were merely quantitative. The 1952 film showed that the expanded right upper lobe had been replaced by a honeycomb structure. There was marked emphysema in the left upper lobe. Both basal lobes were contracted and showed diffuse, ground-glass opacification. There was pleural thickening at both bases, along the outline of the thoracic cage, over the diaphragm, and between the lungs and heart. His cardiopulmonary condition became progressively worse and he died in 1953. Autopsy showed bilateral interstitial asbestotic pulmonary fibrosis, pulmonary emphysema, cor pulmonale, and pleural thickening.

A claim was made by the widow to the state department of labor and industries that death was the result of exposure to asbestos. The insulating company's investigation of the claim included a medicolegal opinion from the Saranac Lake Laboratory, Saranac Lake, N.Y. The conclusion was that there could be no question about the diagnosis of asbestosis as the primary disease process. There was an adequate history of exposure to asbestos containing dust and the radiographic sequence of pulmonary changes, the clinical course and the autopsy findings were all typical of asbestosis. It was concluded that the asbestosis was radiologically apparent in 1948 at the time of the insulating company's employment, that it was reasonably certain that the exertional dyspnea reported during 1950 was related to shipyard exposure prior to 1948, and that the ultimate fatal outcome could have resulted from this exposure whether or not the deceased was exposed further to asbestos dust during subsequent years. Regardless of this opinion, the workmen's compensation claim was awarded to the widow against the last employer who contributed the least exposure to asbestos dust. This was because the state law placed total responsibility on the company employing the individual at the time the disability became apparent.

neoplasms of the lung

There have been many case reports in the literature in different countries and observations on the distribution of lung cancer among asbestotics and in those with silicosis, since Lynch and Smith reported the first case of asbestosis and lung cancer.[28] This probable relationship was finally confirmed by Doll in a study of employees of an asbestos textile plant.[7] He concluded that lung cancer was a specific industrial hazard for men employed for 20 or more years in scheduled areas, with incidence 10 times that in general population. A significant excess was also noted in mortality from respiratory and cardiovascular diseases.

Since Doll's study there have been other epidemiologic studies that have emphasized the advisability of observations over a long period of time. Initially, the Braun and Truan study of Canadian asbestos miners, that indicated negative association between lung cancer and asbestos exposure, cast some doubt on this relationship, at least as it might apply to Canada and the U.S.[29] However, Mancuso in a study of workers engaged in manufacture of asbestos brake linings again observed that there was a definite association with lung cancer, and in addition with peritoneal mesothelioma and cor pulmonale.[9] Subsequently, Mancuso, in an analysis of the Braun and Truan study, cited the inherent limitations and noted that the initial negetive conclusion was technically not justified.[30]

Selikoff et al, in a long-term study of insulation workers with a history of 20 or more years since first eposure to asbestos dust, found that the death rate from cancer of the bronchus and pleura was 6.8 times as high among these asbestos workers as in the general U.S. white male population. This study is particularly interesting because of the stability of the work force in the same trade over the years and the relatively light and intermittent exposure to asbestos. Further, in a projected analysis of smoking history data, it was concluded that "unusual smoking habits cannot account for the high death rate from lung cancer among these workers".[13] In addition they reported increased incidence of pleural and peritoneal mesothelioma, cancer of the stomach, and cancer of the colon and rectum.

Enterline added to this relationship in a study of the mortality of workers employed in the asbestos products industry, as compared with those in the textile industry. He observed a higher rate for lung cancer and cancer of the digestive system.[31]

Knox et al, in a continuation of the first study by Doll, substantiated the greatly increased risk of lung cancer and for other respiratory and cardiovascular diseases.[32] However, the study was unique in comparing workers exposed during different time periods, thus being able to demonstrate that installation of control measures decreased risk.

Various investigators, in reflecting on older studies and observations, have concluded that exposure to asbestos was undoubtedly much much greater and consequently asbestosis occurred more frequently resulting in deaths at earlier age. With the advent of antibiotics, those with asbestosis were saved from deaths due to pneumonia and complications, and lived long enough to develop cancer.[32-34] It is now believed that we are seeing a repetition of these events and that further increase in lung cancer and other malignancies will be observed. Current epidemiologic investigations are not concerned with the association between asbestosis and cancer, but rather with the increased risk of lung cancer and, other biological effects, from asbestos exposure without evidence of asbestosis. There is some evidence that there is direct association with minimal asbestos exposure. Unfortunately, there is no information on effects of duration, nature of exposure, concentration of asbestos dust, or type of asbestos fiber.

CASE REPORT

A white male, age 49, had done pipe insulating work for 23 years for more than a dozen different employers. He was a pack-a-day cigarette smoker. Known chest x-rays 1948, 1951, 1955 were read as no active disease but the May, 1964, chest x-ray showed extensive bilateral pulmonary emphysema and diffuse pulmonary fibrosis in both bases. In addition, there was an area of radiolucency measuring 2 cm in diameter near the anterior aspect of the left fifth rib. A Mantoux test was negative to 1-1000 O.T. A sputum smear was negative for tuberculosis. There was no improvement or change of the lesion with antibiotics. Bronchoscopy was not diagnostic and a left lower lobectomy was done July, 1964. The lesion was a mucoepidermoid carcinoma and asbestosis of the pulmonary parenchyma was identified on examination of the surgical specimen. He developed widespread metastases and died in April, 1965. No workman's compensation claim was made.

mesotheliomas

Mesotheliomas of the pleura and the peritoneum in recent years have attracted the most attention with extensive reports from different countries. This has stemmed from the pioneering efforts of Wagner who discovered the relationship of asbestos and pleural mesothelioma in a classical demonstration of the application of epidemiology to pathology. Since these initial observations, many reports and well defined investigations have been conducted that have substantiated the concept of a causal relationship between pleural and peritoneal mesothelioma.[5,18,35-41] The striking observation common to these reports has been the frequency of a very long latent period, which may average 40 years, with a history of limited exposure to asbestos and minimal fibrosis or lack of asbestosis.

The occupational exposure to asbestos in the following case is in keeping with the observation of exposure among workers engaged in similar trades and occupations, who have developed mesothelioma. Our purpose is solely to bring this unusual finding to the attention of investigators who are studying occupationally exposed groups so that other cases may be recognized.

CASE REPORT

A white male, age 55, saw his physician in July, 1967, because of a swelling of the left scrotum. Chest x-ray in 1948 was essentially negative and in 1958 showed no evidence of tumor or asbestosis. Fluid was aspirated from what was considered to be a hydrocele. The fluid recurred and the patient was admitted to Kadlec Methodist Hospital six weeks later for diagnostic procedures. A biopsy was reported as mesothelioma of the tunica vaginalis. There were metastases to the skin. The diagnosis was confirmed by Arthur Purdy Stout of Columbia University, College of Physicians and Surgeons, New York City. Dr. Stout commented that it was unique in his experience to find a mesothelioma in this situation. The man died in April, 1962 of widespread metastases to the lungs and other organs.

The wife of the deceased and a former fellow worker were questioned on work history. This man had always worked as an engineer in stationary boiler plants, As such, he periodically did repair work on the asbestos insulation of the pipes and boiler covering. His wife also said he always kept a roll of asbestos in his garage at home. The fellow worker volunteered that this material was used for fire protection in areas where the deceased was doing silver soldering of copper tubing.

neoplasms of digestive organs

Observation of gastrointestinal tumors in individuals exposed to asbestos is very limited. In mortality studies, peritoneal mesotheliomas are included and may be responsible for the higher than expected finding. A relatively large number of cancers are coded on the death certificates as *primary site unknown*. In many instances the correct information cannot be obtained. Accurate assessment of the specific organs involved is difficult. Konig first observed, in an autopsy study, a possible relationship of stomach cancer and asbestosis.[12] Selikoff and Hammond observed high rates for cancer of the stomach and for cancers of the colon and rectum.[13, 34] Mancuso, in a similar study found rates higher than expected for cancers of the stomach, large intestine and rectum.[30] It does appear that cancer of the rectum in those exposed to asbestos warrants further investigation and study.

CASE REPORT

A white male was employed as an asbestos insulator. He had been a heavy smoker of cigaretts all of his adult life. His mother had died of tuberculosis at age 46. He worked intermittently, as an asbestos insulator, for numerous employers from 1942 until the time of his death, in 1965, at age 56. He had first worked as a coal miner from 1934 to 1936. During his preplacement medical examination in 1949 he said that a physician in Seattle had advised him, in 1943, that his chest x-ray showed "spots on his lungs." He enjoyed reasonably good health until a few months before his final illness. Examination was not remarkable except that the chest x-ray showed numerous small rounded areas of increased density scattered throughout both lungs, more in the lower third in both lung fields. He was employed with a written work restriction to his supervisor that read "must wear adequate respirator where work may result in exposure to asbestos or other irritants." The supervisor was also asked to provide work with the least possible asbestos exposure. Rehire examinations were performed in 1950, 1955, 1958, and 1960, with periodic health inventories in 1962 and 1965. These were not remarkable. Chest x-rays were interpreted as mild fibrosis due to asbestos with no progression. On one rehire examination, in 1960, rales were noted at the lung bases and in 1962, the vital capacity was 80 per cent.

During his last year of work, this individual developed increasing dyspnea and dry cough. A month before admission to the hospital, he developed a lung infection that improved with antibiotics but did not clear and he was admitted to Kadlec Methodist Hospital for diagnostic study. Chest x-ray showed the entire left lung field to be opaque. Effusion in the left pleural cavity was found and the evacuated fluid contained malignant cells. Bronchoscopic examination revealed a lesion narrowing the left main stem bronchus. Biopsy material from this lesion was reported as representing a poorly differentiated bronchogenic epidermoid carcinoma. The lesion was inoperable and the patient died one month later. Prior to autopsy, the cause of death was reported as primary bronchogenic carcinoma and asbestosis. The autopsy findings, however, showed a poorly differentiated adenocarcinoma of the rectum with multiple metastases to lung, liver, adrenals, lymph nodes and kidneys and diffuse pulmonary fibrosis with deposition of asbestos bodies. The surviving widow filed a claim with the Division of Industrial Insurance of the State Department of Labor and Industries asking for compensation.

diagnostic and workmen's compensation problems

In the differential diagnosis of a disease that may be occupational or environmental in origin, a very detailed occupational and residential history for the whole life of the individual is necessary.[24] This is the basis for recognition and evaluation of any occupational disease, particularly one with a long latent period.

Regardless of the lack of apparent relationship of the job title and asbestos, all job titles and descriptions of work should be recorded. Some examples of those job classifications and occupations, in which asbestos exposure has been subsequently demonstrated, are: plumbers, boilermakers, carpenters, pipefitters, steamfitters, mechanics, stationery engineers, undercoaters, foremen, maintenance electricians, builders, rubber workers, construction, cement workers, boiler repairers, sheet metal workers, and laborers. Since over 3,000 different uses of asbestos exist, it is obvious that the number of occupations and opportunities for work exposure to asbestos are very great.

Employees may have many different jobs, for varying time periods, and be exposed to a variety of environmental agents during the course of their employment years. The facts must be considered in the differential diagnosis. The last job or occupation naturally may bear no relationship to the individual's actual or previous exposures to a specific environmental agent. In some occupations, however, there is a certain consistency of type of exposure by the very nature of the work performed and the materials used, such as occurs among insulation workers.

In addition to the work history, a technical understanding of the various toxicologic and environmental agents of the working environment and of the various industrial processes, is essential in the development of the differential diagnosis.

In evaluation of the various cases that are coming to our attention, we are becoming increasingly aware of the workmen's compensation problems. First, it is necessary to determine whether such diseases are directly associated with asbestos and occupational in origin. Secondly, it is necessary to understand the effects of the long latent period and the statutes of limitation in the workmen's compensation laws. Third, it is necessary to weigh the question of assessment of claim costs to the employer against liability of employers in previous years.

Asbestos workers are loath to change their craft. The work takes them from one construction job to another, or from one employer to another, and often into many states and even different countries. In the case we studied, the individual had done asbestos pipe covering work for 20 years in nine states and two countries and had worked in 53 different locations for 41 different firms. Unless a great deal of attention is given to this matter, the first company to discover and report the disability may be required to pay all the compensation costs. This tends to put an unreasonable burden on the employer with a good occupational health program and to discourage the employment of workers found to have x-ray or other evidence of asbestosis at preemployment examination. Our own state is making a commendable effort to prorate costs among the various employers in proportion to their contributions to the individual's exposure to asbestos. The Department of Labor and Industries also works closely with other states to secure a just settlement for diseased asbestos workers who have been employed outside of Washington.

Workers tend to minimize their symptoms as they do not wish their work to be changed. Often x-ray changes are the only evidence of asbestosis. There is commonly very little relation between the extent of lung fibrosis, as indicated by chest x-ray, and the degree of disability. The physician faces a real problem in determining at what stage the case should be reported as a workman's compensation case. Unless such problems are well handled at the state level, they will encourage greater activity by those seeking to federalize the workmen's compensation system.

Asbestos exposure, occupational and non-occupational, is becoming increasingly important, as multiple biological effects and long latent period associated with exposure to asbestos are recognized.

Increased numbers of cases of carcinoma of the lung and other late sequelae may be expected as result of widespread use of asbestos in insulation material and in other industries of the Northwest during the Second World War.

Literature and case reports pertaining to asbestosis with pleural thickening, plumonary emphysema and cor pulmonale; asbestosis and lung cancer; mesothelioma; and cancer of the rectum illustrate health problems resulting from exposure to asbestos.

A greater awareness of the health hazards associated with exposure to asbestos is needed on the part of those employing asbestos workers of these hazards in order that they may minimize work exposures and provide necessary medical surveillance.

conclusions

The earliest and most reliable symptom of disease due to asbestos is shortness of breath.

The earliest detectable change is in pulmonary function as indicated by lowered vital capacity and decreased exchange rate for CO_2 and O_2.

The extent of changes seen in x-ray may be at considerable variance with the actual disease as indicated by disability or autopsy findings.

All asbestos workers should have chest x-rays and pulmonary function tests as part of a complete annual health inventory.

With the appearance of early signs and symptoms such as shortness of breath, chronic cough or x-ray changes, the case should be reported to the state industrial insurance department.

The workman should be advised to stop smoking and to do some other type of work. If this creates considerable hardship and the man insists on continuing in asbestos exposure, the work should be so governed that his exposure is as far below the maximum permissible air concentration (5 million particles per cubic foot of air in the breathing zone) as is practicable. A respirator should be worn in questionable cases.

Management should have an occupational hygiene program to establish and maintain proper working conditions and should arrange for medical supervision of workers. ■

Medical-Dental Building (99352)
(Dr. Norwood)

abstracto

Carcinoma del pulmón, otras enfermedades respiratorias, complicaciones cardiacas, mesoteliomas de la pleura y del peritoneo, y carcinoma del recto han sido atribuidos al asbesto. El periodo latente puede ser de 30 a 40 años y la enfermedad puede presentarse despues de un contacto no ocupacional. Los que trabajan con asbestos, sin embargo tienen la mas alta incidencia de enfermedad debida al asbesto, no necesariamente debida a exposición en el lugar de trabajo cuando la enfermedad fue descubierta. Enfermedades debidas a la exposición de aquellos empleados en los astilleros, y otras industrias de guerra durante la segunda guerra mundial, están haciendo su aparición y van a aumentar. Médicos, patrones y jefes de seguros industriales deberían compartir interés en el problema creado.

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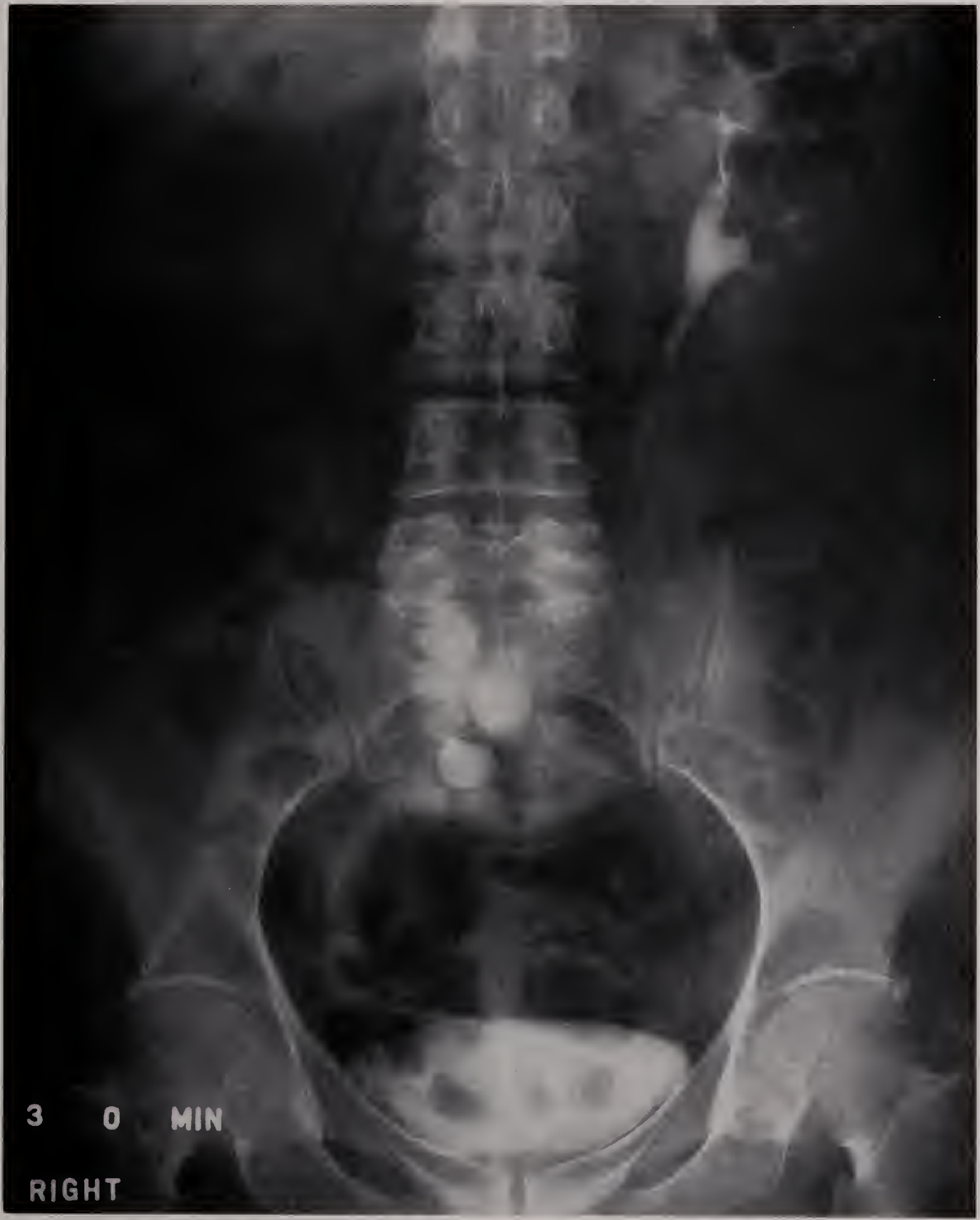
Uncommon Courage

> *What's wrong with vogue words? Motive, mostly. Their use often betrays a slavishness to the present fashion that time quickly reveals to be merely cute or cowardly. Perhaps we need the uncommon courage to say common things in common ways. Or to put it uncommonly, style is the feather on your arrow, not the one in your cap.*

The Good Writer, Vol. V, No. 6, February, 1967.
D. Gordon Rohman

X-Ray of the Month

SUBMITTED BY WASHINGTON STATE RADIOLOGICAL SOCIETY



A 65-year-old woman with hematuria and right ureteral colic. This is a 30 minute film in the intravenous urogram. An oval calcification was seen in the preliminary film low in the right side of the true pelvis.

See page 854

"When I couldn't even smell corned beef and cabbage, I decided it was time for you, Doc."

Maybe he doesn't know when he's well off. But you might want to prescribe long-acting Novahistine LP anyway.

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Annual Meeting, June 26-29, 1968, Sun Valley

Academy of General Practice to meet

The Idaho Academy of General Practice annual convention will be held October 12-14 on the campus of Idaho State University, Pocatello.

Guest speakers are from the University of Washington School of Medicine. They are: John Blackmon, Associate Professor of Medicine, Division of Cardiology; Robert Van Citters, Associate Professor, Physiology and Biophysics; Frank Parker, Assistant Professor of Medicine, Division of Dermatology; Yukio Kumasaka, Clinical Assistant Professor of Medicine, Division of Allergy and Immunology; Francis Wood, Jr., Assistant Professor of Medicine; Director, Clinical Research Center; Leon Spadoni, Assistant Professor, Obstetrics and Gynecology; Roger Bulger, Assistant Professor of Medicine, Medical Director, University Hospital; Warren Chapman, Assistant Professor and Administrative Officer, Department of Urology.

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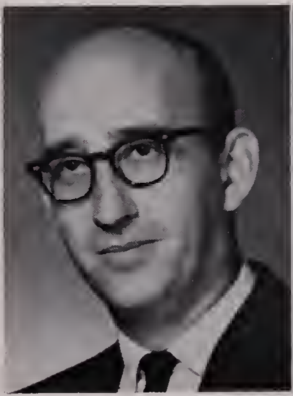
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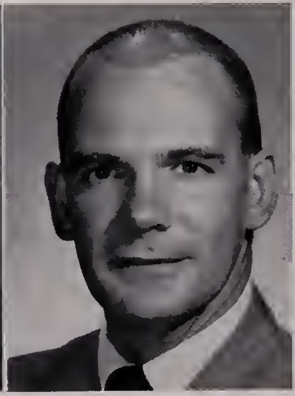
WARREN CHAPMAN, M.D.

Program

Thursday, Oct. 12

9:10	Current Concepts of the Treatment of Myocardial Infarction	Dr. Blackmon
10:30	The Necessities and Problems of the Coronary Care Unit	Dr. Blackmon
11:00	A Look Into the Future — Cardio-vascular Research	Dr. Van Citters
11:30	Discussion Panel	Drs. Blackmon and Van Citters
1:45	What's New in the Recognition and Treatment of Eczema and Acne	Dr. Parker
2:15	Milk and Other Food Allergies in Children	Dr. Kumasaka
3:00	The Big Fall Out Problem—Hair Loss	Dr. Parker
3:30	The Asthmatic Child	Dr. Kumasaka
4:00	Panel Discussion	Drs. Kumasaka and Parker
8:00	Banquet All the Monkeys are not in the Zoo	Dr. Van Citters

Friday, Oct. 13

9:10	Case Discussion—Office Diagnosis and Management of Thyroid Disease	Dr. Wood
9:40	The Induction of Ovulation	Dr. Spadoni
10:30	The Use and Abuse of Oral Antidiabetic Agents	Dr. Wood
11:00	Secondary Amenorrhea	Dr. Spadoni
11:30	Panel Discussion on Endocrinology	Drs. Wood and Spadoni
12:00	Exhibits	
1:45	What's New in Antibiotics	Dr. Bulger
2:15	Eneuresis, Infection and Piddle Patter in Children	Dr. Chapman
3:00	Renal Hypertension	Dr. Chapman
3:30	Chemotherapeutic Agents—Allergic Reactions, Toxicity and Renal Limitations	Dr. Bulger
4:00	Panel Discussion	Drs. Chapman and Bulger

State Board of Medicine Section

The regular meeting of the Idaho State Board of Medicine was held in Boise, July 10-12. Members attending included Charles A. Terhune, Burley; Charles E. Kerrick, Caldwell; Orland B. Scott, Kellogg; Robert E. Lloyd, Boise; Commissioner of Law Enforcement Mr. Warner C. Mills, Boise, and newly-appointed G. Curtis Waid of Idaho Falls.

New officers of the Board are Charles A. Terhune, chairman, and Charles E. Kerrick, vice-chairman.

During the meeting 11 physicians who had been granted a temporary license since the January session received permanent licensure.

Included were: Richard L. Lillard, Woodbridge, Connecticut; Kermit V. Ragain, Idaho Falls; Donald R. Barnes, Nampa; Richard W. Lomas, Renton, Washington; Manual White, Spokane; Harold R. Thysell, Coeur d'Alene; William G. Moore, Coeur d'Alene; Edward L. Boas, Moscow; Richard E. Short, Gooding; D. Ray Haywood, Idaho Falls, and George W. Schneider, Jr., Spokane.

Sixteen physicians were granted license on the basis of endorsement from states maintining standards comparable to Idaho. Included were: Frank A. Nicoletti, Colorado Springs, Colo., graduate University of Colorado School of Medicine, Denver, June, 1948. Internship, Ancker Hospital, St. Paul, Minn. 1948-49. Residency V.A. Hospital, Denver, Colo., 1951-52. Ancker Hospital, St. Paul, 1952-53. V.A. Hospital, Albuquerque, N.M., 1955-56. University of Utah Affiliated Hospitals, Salt Lake City, 1959-60. Anesthesiology.

Cole P. Stephens, Santa Rose, Calif., (Sun Valley), graduate University of Oregon Medical School, Portland, June, 1954. Internship Presbyterian Hospital, Chicago, 1954-55. Residency Presbyterian Medical Center, San Francisco, Calif., 1961-64. Ophthalmology.

Michael Worona, Pocatello, graduate Faculty of Medicine University of Alberta, Edmonton, Alberta, Canada, June, 1960. Internship, Edmonton General Hospital, Edmonton, 1960-62. Residency University of Oklahoma Medical Center, Oklahoma City, 1962-65. Internal Medicine.

Hugh P. Smith, Jr., Boise, graduate University of Pennsylvania School of Medicine, Philadelphia, December, 1943. Internship San Francisco General Hospital, San Francisco, January, 1944 to November, 1944. Internal Medicine Residency Emory University Hospitals, Atlanta, Ga., Pratt Diagnostic Hospital, Boston, Mass., and Hospital of University of Pennsylvania, Philadelphia, 1946-1950. Residency V.A.

Hospital, Long Beach, Calif., July 1, 1964 to present. Radiology.

John M. Casebolt, Albuerque, N.M., graduate University of Missouri School of Medicine, Columbia, Mo., June, 1958. Internship Bernalillo County-Indian Hospital, Albuquerque, 1959-60. Kansas City General Hospital, Kansas City, Mo., 1960-61. Pediatrics.

George E. Lewis, Jr., Dallas, Texas, graduate University of Kansas School of Medicine, Kansas City, June, 1955. Internship Good Samaritan Hospital, Phoenix, July, 1955-March, 1956, and Los Angeles General Hospital, April, 1956-July, 1956. Anesthesiology.

Milton L. Bauermeister, Pocatello, graduate Indiana University School of Medicine, Indianapolis, June, 1959. Internship Fitzsimons General Hospital, Denver, 1959-60. Residency Wilford Hall USAF Hospital, San Antonio, 1960-63. Radiology.

Rodney H. Herr, Portland, Oregon, graduate Northwestern University Medical School, Chicago, Ill., June, 1957. Internship Denver General Hospital, Denver, Colo., 1957-58. Residency Portland V.A. Hospital & University of Oregon Medical School, 1958-62. University of Oregon Affiliated Hospitals, 1962-64. Thoracic Surgery.

Paul R. DeMordaunt, Idaho Falls, graduate George Washington University School of Medicine, Washington, D.C., June, 1961. Internship Latter-day Saints Hospital, Salt Lake City, 1961-62. Residency, Mayo Clinic, Rochester, 1962-65. Radiology.

Lynn D. Weller, Jr., Idaho Falls, graduate University of Utah College of Medicine, Salt Lake City, June, 1963. Internship University of Utah Affiliated Hospitals, Salt Lake City, 1963-64. Residency University of Kansas Medical Center, Kansas City, July 1964 to present. Obsterics & Gynecology.

Theodore E. Alm, Bishop, Calif., graduate Northwestern University Medical School, Chicago, June, 1942. Internship Albany Medical Center Hospital, Albany, New York, 1941-42. Residency Medical College of Virginia Hospital, Richmond, 1942-43. Lahey Clinic, Boston, 1944-49. Surgery.

Jon D. Wilmoth, Jerome, graduate University of Nebraska College of Medicine, Omaha, June 1966. Internship Immanuel Hospital, Omaha, 1966-67. General Practice.

Arthur G. Johnson, Jr., Lewiston, graduate University of Minnesota Medical School, Minneapolis, June, 1960. Internship Saint Joseph's Hospital, Saint Paul, Minn., 1960-61. General Practice.

Charles L. Gates, Spokane, Washington, graduate New York University School of Medicine, June, 1939. Internship New York University Division, Bellevue Hospital, New York, 1939-40. Residency New York Hospital. Graduate Opthalmology, 1940-41. Bellevue Hospital, New York City, 1946-47. Opthalmology.

Harold A. Bursell, Redding, Calif., graduate Loma Linda University, Loma Linda, Calif., June, 1941. Internship Glendale Adventist Hospital, Glendale, Calif., 1940-41. Paradise Valley Sanitorium Hospital, National City, California, February, 1943-March 1943. General Practice.

Ercil R. Bowman, Jr., Bremerton, Washington, graduate Northwestern University Medical School, Chicago, June, 1955. Internship The Swedish Hospital, Philadelphia, 1959-60. Residency, U. S. Naval Hospital, Philadelphia, 1959-62. Orthopaedic Hospital, Los Angeles, 1962-63. Orthopedic Surgery.

Three physicians wrote the Idaho Written Examination and were successful, they are: Wayne L. Coleman, Boise (military duty), graduate University of Utah College of Medicine, Salt Lake City, June, 1966. Internship Fitzsimons General Hospital, Denver, 1966-67. General Practice.

Philip D. Affleck, Minneapolis, Minnesota, graduate University of Utah College of Medicine, Salt Lake City, June, 1967. Internship University of Alabama Hospitals and Clinics, Birmingham, Alabama. 1957-1958. Residency University of Minnesota Hospitals, Minneapolis, 1963-1967. Otolaryngology

Otto G. Riml, Orofino, graduate University of Graz Medical School, Graz, Austria, November 22, 1930. Internship University Hospital, Graz, 1931-44. Misericordia General Hospital, Winnipeg, Canada, 1956-57. General Practice.

In addition to the licensure of physicians, the Board met with the physical Therapy Advisory Committee to consider the applicants for registration.

Members of the committee included Mr. J. Perry Silver, Boise, Chairman; Douglas S. Raymond, Idaho Falls, and Mrs. Mary Yost, Twin Falls.

Two Physical Therapists were granted Registration Without Examination on the basis of endorsement by states maintaining standards comparable to Idaho. They were: Mr. Hugh M. Moffatt, Jr., Boise, and Mr. Charles L. Strickell, Coeur d'Alene.

Two Temporary Licenses have been granted since the Board Session. Receiving them were: Richard Christian Leck, Twin Falls (Denver, Colo.), graduate University of Chicago, June, 1959. Internship, University of Chicago Hospitals and Clinics, June, 1960. Pediatric residency, same hospitals July 1, 1960 to June, 1962. Pathology residency, July, 1964 to present at University of Colorado Medical Center, Denver. Granted T.L. No. 390 July 21, 1967. Pathology.

Michael S. Pecora, Nampa, graduate University of Utah College of Medicine, Salt Lake City, June, 1962. Internship St. Luke's Hospital, Chicago, June, 1963. Pediatric residency, University of Utah Affiliated Hospitals, Salt Lake City, 1963-65. Granted T.L. No. 391, July 25, 1967. Pediatrics.

fall 1967

DORSEY Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M.D., Director of Medicine.

this issue: smog, smaze or smust...

Smog, smaze or smust...effects of air pollution on upper respiratory tract

Nathan Flaxman, M.D., Diplomate, American Board of Internal Medicine, Chicago, Illinois

In Los Angeles it is *smog* (smoke and fog). In New York City *smaze* (smoke and haze). In El Paso *smust* (smoke and dust). The original factor was smoke plus such natural phenomena as fog, haze and dust, but air pollution has mushroomed from a smoke problem in our industrial cities into a major economic, esthetic and public health problem that affects practically every American locality and citizen.[1,2] Respiratory disease, of course, is by far the most costly effect of air pollution, for contaminated air can aggravate our illnesses, deplete our strength and shorten our life span.[1]

The greatest problem in dealing with solid wastes is that they are not quickly returned to dust. To aid the decomposing process, the great bulk of such waste is burned, polluting our air in the process.[3] Dr. Jack McKee of the California Institute of Technology[4] has calculated that in Los Angeles County, which has more than six million people, about three pounds of gaseous wastes per person per day (on a dry-weight basis) enter the atmosphere. This is twice as much as solid refuse disposal and six times as much as the contaminants in waste water. It is estimated that in New York City, 730 pounds of pollutants, a little over half the size of a compact two-door sedan of foreign make, is annually thrown into the air for each man, woman and child in the city.[5]

Air pollution is an evident factor, not only in the common cold and upper respiratory disease, but also in chronic bronchitis,[2] pulmonary emphysema,[6] bronchial asthma,[7] pneumonitis and lung cancer.[8] Its effect on the incidence of pulmonary tuberculosis is unproved,[9] although it is conceivable that the presence of various materials polluting the air might do this. A siege of smog in Denver, the "mile high city," in December 1965 was accompanied by respiratory infection that doubled normal absentee rates in schools, factories and city government.[10]

While air pollution is only one factor, it has become important in the causes of most of the afflictions of the respiratory tract. This has been shown not only by the Denver occurrence, but also by detailed study[2] of respiratory illness in a small group of 313 men

from October 1962 to May 1963 when there were 202 episodes involving the upper respiratory tract. The attack rate of illness was related in time to increased concentration of both smoke and sulphur dioxide in the atmosphere of the district in which the men lived.

Other factors often mentioned, include exposure to those who have colds, exposure to extreme changes of temperature, allergy and bacterial infection. However, when low individual resistance due to lack of rest, overwork, fatigue, improper or unbalanced diet, previous illness and emotional stress are included as causes, we enter the realm of somewhat obscure relationships. Much more emphasis can be placed on the role of polluted air.

The symptoms, signs and complications of involvement of the upper respiratory tract, especially the common cold, are the same regardless of the causative factor. Swelling of the lining of the nose, the scratchy dry throat, the discharge from the nose at first watery then thicker, discolored and more tenacious, the eyes tearing, and frequent sneezing are all part of the Number 1 human ailment. Concurrent or residual sinusitis when mucus is trapped there, middle ear involvement due to interference with drainage, laryngitis and bronchitis are complications of the common cold. The primary interference is with a most important function of the nose—the cleansing of foreign matter in the first line of "air defense" to prevent it from entering the breathing tract.

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However, the diagnosis and subsequent decision on how to treat the patient so affected rests basically on the relief of symptoms that cause him the misery. The stuffed, runny nose, the clogged ears, and the harsh dry cough—all the symptoms that make common cold sufferers feel miserable and interfere with their sleep—can be alleviated with medications of the oral nasal decongestant/antihistamine combination type. The burning sensation in the throat, soreness of the chest and even chest pain can also be relieved by such medication. Rest in bed if there is fever (but confined to home at least), liberal fluids, uniformly warm surroundings and adequate humidity in the room, are all helpful adjuncts to the medication. Most common cold sufferers recover rapidly and are symptom-free in four to ten days.

Further treatment, altered by the fact that the affliction hangs on for more than the usual duration of the common cold, requires consideration of allergy, which is most frequently the prolonging factor. But air pollution itself may often be the culprit.

(Concluded on following page)

At the Third National Conference on Air Pollution held recently, it was emphasized that this subject had received more attention in the past four years than in all previous history. Spicer,[11] an active participant at this conference, reiterated that it behooves the practicing physician to be aware of trends in respiratory disease and to accept a major role in community action relating to air pollution and respiratory health. By taking a positive stand physicians have been instrumental in the development of antipollution legislation. An outstanding example is Los Angeles where major steps have been taken by abolishing coal burning, and even banishing oil burning, seven months a year. Natural gas must be used instead and it must be used by industry when available. Backyard incinerators have been abolished in favor of landfill disposal, and building incineration ended except for a few expensive smokeless furnaces.[10] Concerted action can be taken against particular industrial nuisances. One company that disregarded complaints discovered its error when thousands of its credit cards were returned by irate customers who decided to patronize competing companies.[12]

Summary. Respiratory disease is the most important and most costly effect of air pollution, whether termed smog, smaze, or smust. Air pollution is an economic, esthetic and public health problem that affects practically every American locality and citizen. New sources of air pollution are invisible and odorless, but the harmful gases and liquid droplets are there. Triggered by sunlight, some of these undergo mid-air chemical changes and the results are even more irritating to the upper respiratory tract. The symptoms, signs and complications, especially of the upper respiratory tract, can be readily aborted by modern medication but may be unduly prolonged by polluted air. In steps taken to prevent this, the practicing physician can take a major role.

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OREGON

Oregon Medical Association—2164 S. W. PARK PLACE, Portland, Oregon 97205

PRESIDENT *John E. Tysell, M.D., Eugene*
SECY.-TREAS. *Alfred C. Hutchinson, M.D., Portland*
EXECUTIVE SECY. *Mr. Roscoe K. Miller, Portland*
Annual Meeting, Sept. 19-23, Portland

New Assistant Dean at UOMS

The new assistant dean at the University of Oregon Medical School is Richard Sleeter, professor of pediatrics and director of the Crippled Children's Division at the School.

In addition to the Crippled Children's Division, Dr. Sleeter will head the new $5 million Mental Retardation Demonstration Center to be constructed at the Medical School, with a satellite unit on the University campus in Eugene.

RICHARD SLEETER, M.D.

Dr. Sleeter is a 1943 graduate of the Washington University School of Medicine in St. Louis. He interned and served his residency at the University of Utah College of Medicine. He joined the Medical School faculty and was named director of CCD in 1953. Prior to that he was in private practice in Medford.

Dr. Lobitz to Deliver Pollitzer Lecture

Walter C. Lobitz, professor and head, division of dermatology, University of Oregon, will deliver the 15th annual Sigmund Pollitzer Lecture at New York University School of Medicine on Tuesday, November 21. Dr. Lobitz's topic will be, "The Human Eccrine Sweat Gland."

The Pollitzer Lectures are made possible by a grant from Mrs. Sigmond Pollitzer, who established the lectureship in honor of her husband, the late Sigmund Pollitzer, former professor of dermatology and syphilology at New York Post-Graduate Medical School and Hospital. Under the terms of the grant, outstanding scientists and teachers are invited to speak on selected subjects relating to skin diseases by the department of dermatology of the New York University School of Medicine.

Medical Education Conference

A Conference on Clinical Medicine and Medical Education will be presented October 5-7 by Sacred Heart General Hospital Department of Medical Education in Eugene. The program includes:

Thursday, Oct. 5

Ernest M. Gold, M.D., Chief, Metabolic Services, V.A. Center, Los Angeles
Diabetes Mellitus: Recent Developments in Diagnosis and Management

John E. Kasik, M.D., Department of Medicine. University of Chicago
Legal Aspects of Drug Reactions

Roger H. L. Wilson, M.D., University of California, San Francisco Medical Center
Chest Disease: A Never Never Land

Paul F. Formel, M.D. Cardiologist, Albany Medical College.
Some Older Developments in Cardiac Diagnosis

Panel, 1:30 p.m.

Postgraduate and Continuing Medical Education
Moderator: Leon Jacobson, M.D., Div. of Biological Sciences, University of Chicago
Panelists: Formel, Kaiser, Gold, Wilson, Kasik, Mr. Joel W. Novak, Health Scientist Administrator, Office of Research and Development, Dept. of HEW, Washington, D. C.

Friday, Oct. 6

K. Alvin Merendino, M.D., Chairman, Department of Surgery, University of Washington
Surgery: "Where do we go from here?"

William W. Krippaehne, M.D., Chairman, Dept. of Surgery, University of Oregon
Information Acquisition in Surgical Patients: Prospects for the Future

Irwin H. Kaiser, M.D., Chairman, Department of Obstetics-Gynecology, University of Utah
Recent Scientific Developments in Obstetrics and Gynecology

John S. Thompson, M.D., Department of Medicine, University of Chicago
Urticaria: A Symptom of Allergic, Nonallergic, Benign, and Fatal Disorders.

Panel, 1:30 p.m.

Postgraduate and Continuing Medical Education
Moderator: Arthur Flemming, L.L.B., Former

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Secretary of HEW; now President, University of Oregon

Panelists: Merendino, Thompson, Gurney, Balint, Latin, Krippaehne, Novak.

Saturday, Oct. 7

Clifford W. Gurney, M.D., Chm., Department of Medicine, Rutgers University Medical School

Basic Distinctions Between Primary and Secondary Polycythemia

Edward M. Litin, M.D., Chm., Department of Psychiatry, Mayo Clinic

Futures in Psychiatry for all Physicians

John A. Balint, M.D., Chief of Gastroenterology, Albany Medical College

Exploring the Unknown: "Through the GI Tract with Rod, Gun and Camera"

State Board of Medical Examiners

Officers were elected recently at a regular three-day meeting of the Board of Medical Examiners of the State of Oregon. David B. Judd, Eugene, will serve as chairman; David E. Reid, D.O., Lebanon, vice-chairman, and Allen L. Ferrin, Salem, secretary-treasurer.

The following doctors were licensed to practice medicine in Oregon: Richard Allen, Cameron Clarence Bangs, Emil Joseph Bardana, Jr., Richard Keith Beemer, Bolek Brant-Zawadski, Travis Ray Cavens, Barbara Shaw Clark, Langley Reyburn Collis, Leland Loyal Cross, John Cornelius De Vries, Douglas Patrick Fisk, Thomas Walter Friedland, Donald Woodrow Froom, David Norman Gilbert, John Jay Greve, Richard Allen Hendricks, George William Ingham, II, Edwin Allen Kayser, Jr., Kenneth Shockley Keyes, David Ashby Kimball, Jane Ann Kinser, Edna Louise Kremkau, Clifford Stephen Melnyk, Clarence Lorenzo Morgan, William Edwards Morton, Gary Thomas Prohaska, George Himes Rice, William Ernest Ricker, Forest Tempel Riekhof, Dayton Rusby Seabaugh, Jr., Joel Leonard Seres, Robert Joseph Smith, Jr., Roger Garrett Smith, Leland Clair Spaulding, Clifford Oscar Stranburg, John Scott Struckman, Joan Kunkel Tanner, and George Frederick Will, Jr., all of Portland.

John Newark Burkey and Merritt Dwain Moon, Longview, Washington; Steven James Carlisle, John Linus Carter, and Franklin Howard Russell, Salem; Robert Dempsey Christensen, Oregon City; Hugh Glenn Cleary, Trail, Oregon; Harvey Barron Cornell, Granite Falls, Washington; Jack Richard Daniels, Monterey, California; Allen Morgan Donnelly, Carrollton, Texas; Furm Mofford Duncan, Jr., Peace Corps; Edward Gary Edwards, Griffiss AFB, Rome, New York; James Nicholas Eustermann, United States Army; Hayden Avery Glatte, Jr., Medford; Charles Murrel Hickman, Oregon City; Stanley J. Huber, United States Air Force, Los Angeles, California; Stanley Lawrence James, Eugene; Lawrence Lyle Knight, Boise, Idaho; Harry Daniels Moore, Albany; Charles Walter Norris, Springfield; Roy Bashford Patton, Detroit, Michigan; John Phillip Ritchey, United States Army; Richard Allen Romaine, Hillsboro; Franklin Howard Russell, Salem; James Jasper Simerville, United States Air Force, Lackland AFB, Texas; Michael Brian Strauss, United States Navy, Groton, Connecticut; Earl E. Sunderhaus, Ann Arbor, Michigan; Raymond Gerard Veillet, Sacramento, California; Victor Joseph Vilk, Roseburg; Velda Jenecke Weber, Belmond, Iowa; Harry Jackson Weber, Belmond, Iowa, and Delbert Frederick Wichelman, Sacramento, California.

Eugene Frederick Augter, D.O., Denver, Colorado; Robert Gene Kuhns, D.O., Yakima, Washington; William Edward Meaney, D.O., Cincinnati, Ohio; Robert Douglas Phelps, D.O., Grand Island, New York; Edward Earl Rockwood, D.O., Kirksville, Missouri; Harley Whalen Stephens, D.O., Boulder, Colorado; and Rudolph Orson Waiton, D.O., Redmond, Washington.

The next regular meeting of the Board of Medical Examiners is set for October 19-21. Applications to be considered during the October, 1967, meeting must be filed with the office of the Board no later than September 19, 1967.

OBITUARIES

DR. PAUL HUBERT HOMANN, *Portland, died May 14. He was 59. He was graduated from Loma Linda University School of Medicine, Loma Linda, Los Angeles, in 1936. Dr. Homann was in general practice in Portland from 1936 until the time of his death. He served in World War II. Cause of death was calcific atherosclerosis of a coronary artery.*

DR. HARLEY REX SHIELDS, *Portland, died June 2. He was 75. He was born in Sprague, Wash. and raised in Bethel, Ore. He was graduated from the University of Oregon Medical School in 1925. Prior to that, he had received a pharmacy degree from Oregon State College. He was a Navy veteran of World War I. Cause of death was liver failure due to cirrhosis and hepatoma.*

DR. HARRY JOSEPH ANDERSON, *Corvallis, died June 4. He was 78. He was born at Skidmore, Missouri, where he received his early education. He was graduated from Northwestern University Medical School, Chicago, in 1911. Dr. Anderson began practice in Corvallis in 1913 and continued until his death, except for the time he was with the U.S. Army in France during World War I. He served as a First Lieutenant with the Army Medical Corps. Cause of death was arteriosclerotic heart disease and congestive heart failure.*

WASHINGTON

Washington State Medical Association—**444 N.E. RAVENNA BLVD., Seattle, Washington 98115**

PRESIDENT *Lucius D. Hill III, M.D., Seattle*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual Meeting, Sept. 10-13, Seattle

Aagaard Named to PMA Committee

George N. Aagaard, Professor of Medicine at University of Washington School of Medicine, has been named to a ten-man advisory committee of the Pharmaceutical Manufacturers Association. The committee reviews grant requests and makes recommendations to the Board of Directors of the PMA Foundation. The committee also suggests programs for consideration by the Directors.

The Foundation was established in 1965 and has distributed approximately $1 million in support of studies on drugs and in the field of clinical pharmacology.

Dr. Aagaard is Director of the Division of Clinical Pharmacology at UWSM.

Changes Announced for Rheumatic Fever Control Program

Since its inception in 1952, the Rheumatic Fever Control Program has been looking for a way to offer a diagnostic service to participating physicians. After much consideration they have arrived at a straight referral to designated consultants. Therefore the following changes have been made in the Rheumatic Fever Control Program.

1. *Diagnostic Service.* A referral service is now available for patients about whom the attending physician is uncertain as to the diagnosis and need of prophylaxis. The service is without charge, but it is expected the referring physician will use the non-charge conditions only for those patients who would find it difficult to pay.

Application for prophylaxis is made in the usual manner to the Rheumatic Fever Control Program. A list of the consultants will be sent to the referring physician with a letter of authorization. The referral will be made by the private physician. The consultant upon completion of his study will send a copy of his consultation, along with his charges to the Rheumatic Fever Control office. He will then be reimbursed through the program office.

Since the program is new, it is classified as a feasibility study and as such is limited in scope as far as the number and distribution of consultants are concerned.

2. *Congenital Heart Disease.* For those patients with congenital heart disease—particularly in those individuals who go into failure with each episode of respiratory infection, and for those patients who seemingly have an unusual number of respiratory infections and who are already debilitated as a result of their heart disease—there will now be offered prophylaxis along the same lines as those with Rheumatic Fever or Rheumatic Heart Disease. The procedure will be the same as now being used except a letter will be required giving more information relative to the need for prophylaxis. It is hoped that the privilege will not be abused. If so, the program will be defeated at an early stage.

3. *Addition of Erythrocin to Drugs Available for Prophylaxis.* The program will now furnish Erythrocin for patients sensitive to both penicillin and sulfa. The dosage schedule will be 250 mg twice daily. Special prescriptions will be issued for this drug and, because of the cost involved, it will be necessary for the physician and perhaps the visiting nurse, if requested, to keep close check on the patient to see that the drug is used only for prophylaxis. Adequate documentation of sensitivity to both sulfa and penicillin will be requested before this drug is issued.

4. *Streptococcal Glomerulonephritis.* Occasionally, there have been requests for penicillin prophylaxis following acute streptococcal glomerulonephritis. In the past these requests have been denied.

continued on page 847

New view of an oral contraceptive at work

Although suppression of ovulation remains the primary mode of action of oral contraceptives, newer knowledge indicates that products like Norinyl-1 — a combination of both low-dosage progestogen and estrogen for the full treatment cycle — may provide multiple action that helps explain their unexcelled record of contraceptive effectiveness. This report explores the possible secondary protective mechanisms offered by combined hormonal administration.

Accumulating evidence has indicated that sparse, highly viscous cervical mucus has a possible adverse effect on the motility and survival of spermatozoa.

The estrogen-opposing progestational ingredient of Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.) changes the usual midcycle picture of a thin, watery cervical mucus. The result — a built-in barrier that appears to inhibit sperm from reaching the ovum should one be released. The inset in the adjoining photograph shows immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

See last page for contraindications, precautions, side effects and dosage.

How the estrogen-opposing action of Norinyl-1 creates cervical mucus that may be hostile to sperm penetration

Normally, estrogen activity during the fertile midcycle stimulates the production of a profuse and watery cervical mucus that permits maximum sperm motility and promotes penetration.

But what happens when Norinyl-1 is administered? Its potent progestogen, norethindrone, opposes estrogen stimulation of cervical mucus. Consequently, the amount of mucus decreases and its viscosity increases. This results in a sparse but thick mucus barrier that appears to diminish the vitality of the sperm and to impair its powers of penetration.

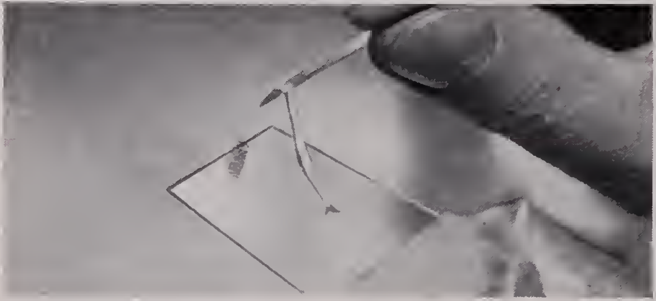
The role of viscous cervical mucus as a secondary action of Norinyl-1

In a report on 89 patients taking this medication,* cervical mucus obtained from cycle day 5 to cycle day 29 appeared scant and thick and exhibited little or no Spinnbarkeit.

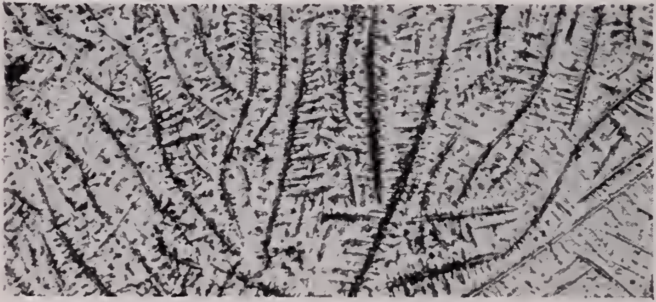
In the opinion of this investigator, the effect on cervical mucus may be sufficient to prevent conception.

*Cohen, M. R.: Symposium: Mechanisms of Action of Low Dosage Oral Contraceptive, Yale University Medical Center, New Haven, Conn., April 6, 1967.

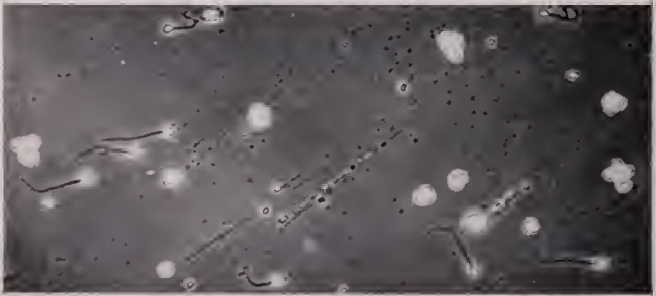
Normal cervical mucus at midcycle in untreated patient is known to permit sperm motility... promote sperm penetration.



Cervical mucus is thin and watery with a stretchability (Spinnbarkeit) of 15 to 20 cm.

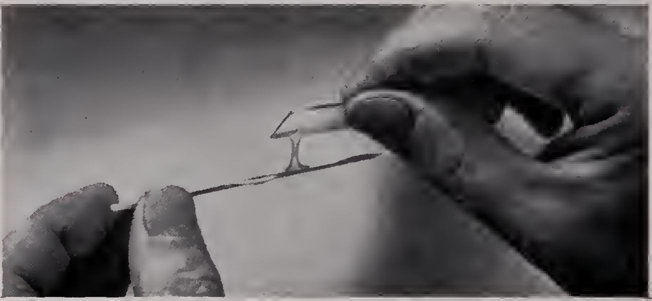


Thin, watery mucus crystallizes into this well-defined, fernlike pattern within a minute.

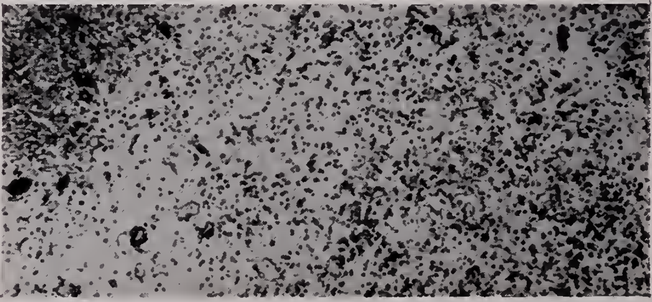


Spermatozoa appear healthy, are active and freemoving.

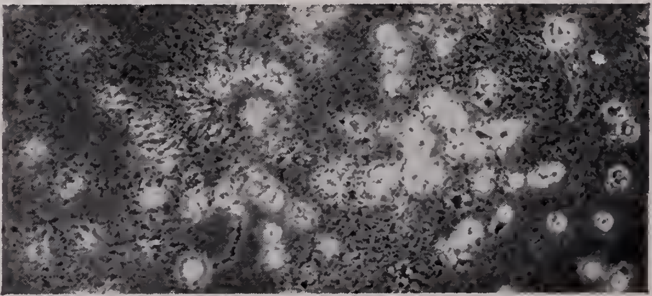
Viscous cervical mucus at midcycle produced by Norinyl-1 appears to impair sperm vitality... inhibit penetration.



Cervical mucus is scanty, thick and viscous. Spinnbarkeit is 1 cm. or less.



In thick, viscous cervical mucus the fern pattern is poorly defined or absent.

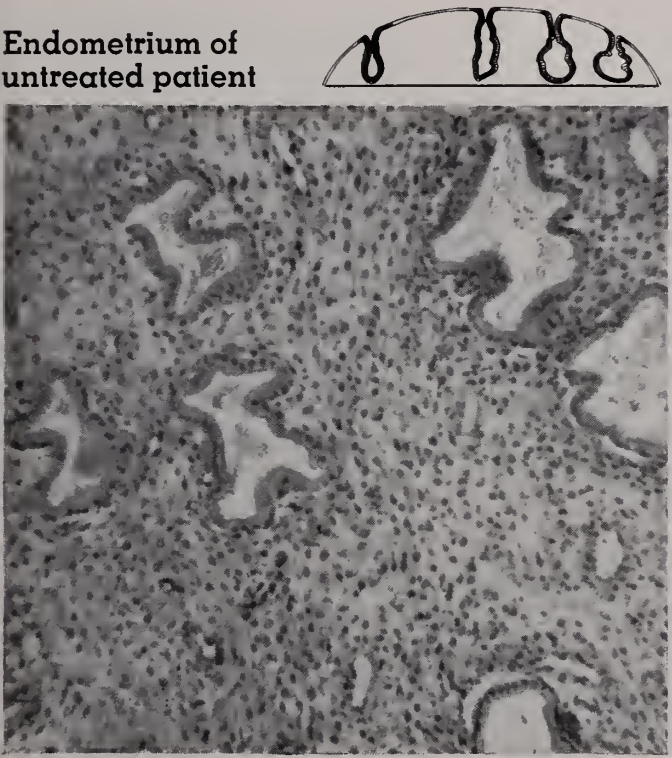


Immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

How Norinyl-1 alters normal endometrial responses— another possible protective mechanism

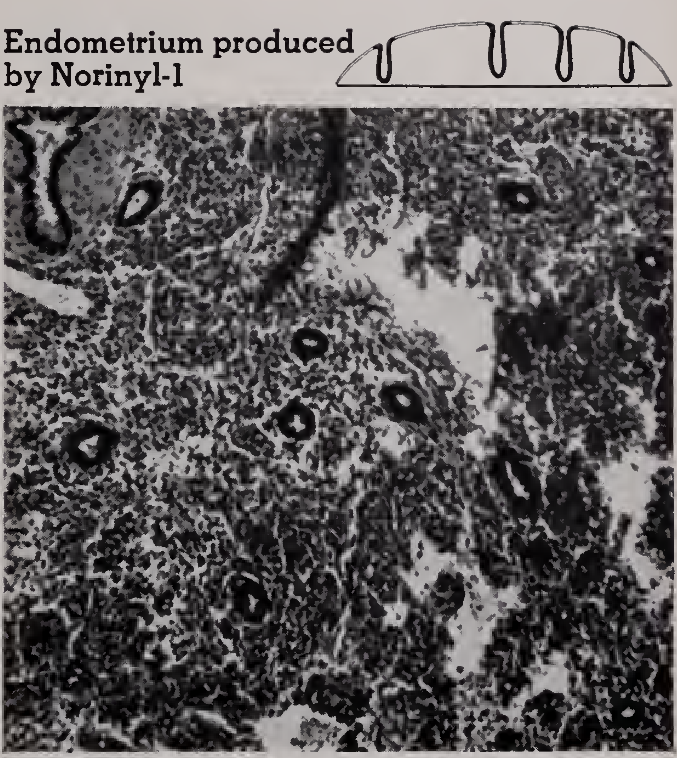
Let us suppose that an ovum is released—as occurs in an occasional, rare case—and somehow a sperm succeeds in penetrating the cervical mucus barrier. Should this come about, one additional action of Norinyl-1 may protect the patient from unwanted pregnancy. The theory is that progestogen intake makes endometrial tissue unreceptive to implantation.

Endometrium of untreated patient



Normally, the endometrium progresses through a proliferative phase stimulated by estrogen and a secretory phase stimulated by progesterone. During the secretory phase the endometrium is receptive to the fertilized ovum.

Endometrium produced by Norinyl-1



When Norinyl-1 is administered its progestogen component—norethindrone—accelerates the secretory phase and suppresses glandular and vascular development.

See last page for contraindications, precautions, side effects and dosage.

new Norinyl®-1 tablets

(norethindrone 1mg. c̄ mestranol 0.05mg.)

effective fertility control on half the previous dosage

maintains ratio of the established norethindrone/mestranol combination

lower cost

new Norinyl®-1 tablets

(norethindrone 1mg. c̄ mestranol 0.05mg.)

Reduction of oral contraceptive dosage to lowest effective levels has become a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now available in a new strength in which *both* norethindrone and mestranol are reduced 50 percent. Studies show that Norinyl-1 achieves fertility control with only 1.05 mg. of combined progestogen and estrogen per tablet.

Norethindrone was first reported for use as a progestational agent in human beings in 1955. Norethindrone 2 mg. with mestranol 0.1 mg., as an oral contraceptive, is currently in use by over 2,000,000 women. Clinical experience now establishes that Norinyl-1 also amply meets the criteria of reliability and safety.*

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

PRESCRIBING INFORMATION

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia, or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of Norinyl-1 in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with Norinyl-1. Therefore, if such tests are abnormal in a patient taking Norinyl-1, it is recommended that they be repeated after the drug has been withdrawn for 2 months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibroids may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac, or renal dysfunction, require careful observation. 5. Although a cause and effect relationship has not been established, Norinyl-1 should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged Norinyl-1 therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Norinyl-1 therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. A cause and effect relationship has not been demonstrated. 11. Because of the effects of estrogens on epiphyseal closure, Norinyl-1 should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask the onset of the climacteric. 13. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following adverse reactions have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma, breast changes (tenderness, enlargement and secretion), loss of scalp hair, change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, erythema multiforme, erythema nodosum, hemorrhagic eruption, migraine, rash (allergic), itching, rise in blood pressure in susceptible individuals, mental depression.

The following occurrences have been observed in users of oral contraceptives. A cause and effect relationship has not been established: thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased bromsulphalein retention and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metapyrone test, pregnanediol determination.

Other side effects reported to have occurred in association with use of this drug are dizziness, hirsutism, pains in legs, back, chest and abdomen, dysuria, drowsiness, vaginal discharge, libido increased and decreased, eruptions, hypermenorrhea, hypomenorrhea, increased appetite, G.U. infections, varicose veins, abdominal fullness, acne, headache, nervousness, allergies, blurred vision, pain in eyes, and itching in eyes. *For complete clinical data, see package insert.*

Dosage and Administration: 1. One tablet of Norinyl-1 is administered orally for 20 days beginning on day 5 of the menstrual cycle. (Count day 1 of the cycle as the first day of menstrual bleeding.) Repeat this dosage schedule for each cycle. 2. If no menstrual period occurs after a cycle of treatment (20 tablets) in which patient adhered to the schedule, the patient must be instructed to resume taking the Norinyl-1 tablets 7 days after the previous 20-day course was completed. For example, if the last pill of a previous cycle had been taken on a Sunday, then a new cycle of treatment should begin on the following Sunday. 3. In the postpartum woman, it is recommended that the first cycle of treatment should begin on day 5 of the first menstrual cycle. However, Norinyl-1 should not be administered during lactation.

Availability: Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.)—Dispensers of 20 and 60 and bottles of 250 tablets.

norethindrone — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

continued from page 842

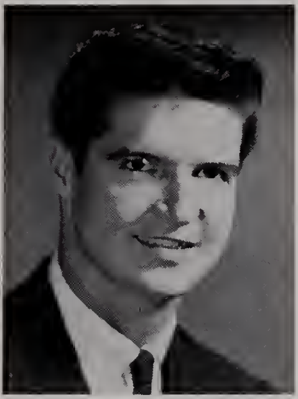
Now, patients will be given a one-year supply of penicillin upon request by the referring physicians and upon proof that the patient has had an antecedent streptococcal infection. (ASO above 350 or a demonstrated two tube rise.)

The success or failure of the changes is dependent entirely upon the referring physician. If the program is over-utilized, it will be discontinued at an early date. If, however, after a year's study, it appears to have definite merit, it will be continued and in all probability enlarged.

John Harter Wins Hutchinson Scholarship

A premedical student, John Harter, from Florida has been announced the winner of the Fred Hutchinson Medical Scholarship. The award has been donated by the Major League Baseball Writers and Broadcasters Association.

Harter, 21, of Bradenton, Fla., is the third winner of the award, given in memory of Seattle's baseball great who died of cancer.



JOHN HARTER

Harter has been working at the Pacific Northwest Research Foundation in Seattle since May. He has financed his own education. His father is physically disabled; his mother works to care for four younger children.

Dr. Bucove Appointed

Bernard Bucove, State Director of Health, Olympia, has accepted appointment to the National Advisory Health Manpower Council.

Dr. Bucove is now serving on the Health Insurance Benefits Advisory Council, the Advisory Committee of State Officials to the Atomic Energy Commission, the State Advisory Committee to the Selective Service System, and the President's Committee on Employment of the Handicapped.

U of W Receives $30,000 Grant

A $30,000 grant was recently received by the Department of Biomedical History at the University of Washington. Funds will be used to extend the program of the Department, established three years ago and headed by Charles W. Bodemer.

Doner is the Josiah Macy Jr. Foundation of New York. The Foundation previously sponsored two postdoctoral fellowships in the department.

Current Concepts in Drug Therapy

Drug Therapy, a course given annually, is one of the most popular programs offered by the Department of Continuing Medical Education of the University of Washington School of Medicine. The 1967 course will be given in the Health Sciences Auditorium, October 26-27. It is directed by George N. Aagaard, Head of the Department of Clinical Pharmacology.

Twenty-four members of the faculty of the School of Medicine will participate. Topics for discussion include, anemia, shock, thyroid disease, anxiety, depression, tuberculosis, emphysema, chronic bronchitis, chronic obstructive pulmonary disease, seizure disorders, tic douloureux, anticoagulants in cerebrovascular disease, oral contraceptives, adrenal hormones, antidiabetic agents, diuretics, cardiac arrhythmias, beta adrenergic blocking compounds, drugs for women during pregnancy and drugs in newborns.

OBITUARIES

DR. VIRGIL G. BROWN, *41, Ellensburg, died June 25. He was born at Okanogan. In 1944 he enlisted in the U.S. Navy and served as a lieutenant junior grade on the East Coast. He was graduated from the University of Washington School of Medicine in 1952. He began medical practice in Ellensburg in 1953. At the time of his death, he was associated with the Valley Clinic. Cause of death was pulmonary congestion and edema due to cardiac arrhythmia.*

DR. JOSEPH W. LYNCH, *Spokane, died June 22. He was 64. He was a life-long resident of Spokane. In 1929 he was graduated from Northwestern University Medical School, Chicago. Cause of death was acute myocardial infarction.*

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The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

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When the problem is only skin deep

USE 'POLYSPORIN'® brand POLYMYXIN B-BACITRACIN OINTMENT

for topical antibiotic therapy with minimum risk of sensitization

Caution: As with other antibiotic products, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

Supplied in ½ oz. and 1 oz. tubes.

Complete literature available on request from Professional Services Dept. PML.

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Observations on the British National Health Service

D. KAY CLAWSON, M.D., Seattle, Washington

As requested, I jotted down some of my observations on the British National Health Service while traveling through Britain as an Exchange Fellow of the American Orthopaedic Association. Four American and two Canadian orthopedists are chosen every other year for this opportunity. As honored guests of the British Orthopaedic Association we toured Britain for six weeks, visiting fourteen cities and twice that number of hospitals. We had an opportunity to meet with representatives of the National Health Service and senior and junior members of the orthopedic staff. In addition, we had the opportunity of discussing medicine with medical students and numerous patients, both as they were seen on the wards and in outpatient clinics. I also had the opportunity to visit three Scandinavian countries and can say that I found no system of medical practice which I felt was uniformly satisfactory, either from the standpoint of the patients or doctors. The thing that most stands out in my mind is that despite numerous disadvantages and difficulties, the people overwhelmingly approve the system.

I know you are aware of the organization of the Health Service with its four divisions under the Ministry of Health. My only contact was with the largest division, that of hospitals. The hierarchy, even down to the regional board level, is composed primarily of laymen, with physicians acting more in an advisory than in an administrative capacity. While I got the distinct impression that the administrators generally sought ideas and help from the physicians, there is little question that they have an eye on practical politics and economics.

D. KAY CLAWSON, M.D.

The cost of running the Service in 1965 was 1,308 million pounds ($3,600,000,000). This figure is misleadingly low, in that capital expenditures for modernizing equipment, remodeling, and new construction have been kept to a bare minimum over the past 25 years. Today hospital construction is going on in virtually every center, but most construction is adding wings or units and attempting to utilize the old physical plant, many dating back to the 1700 and 1800's, thus making an efficient operation in the future virtually impossible. Only three new hospitals have been completed since World War II. To justify the rising costs, the Office of Health Economics has put out a booklet on the efficiency of the hospital service. In Britain, as in the United States, salaries and wages are the largest single expenditure. Increases in doctors' incomes were singled out; yet little is made of the fact that nurses' salaries rose 4.2 times and non-medical incomes rose 4.6 times, while the doctors' income rose only 2.5 times. Today the house officer (intern) starts at 1,100 pounds ($3,080) and the consultant (specialist) at 3,200 pounds ($8,960).

The problems of providing optimum medical care seem insurmountable to both the ministry and the doctors. I was repeatedly told that the country was too poor to speed up the physical plant modernization or increase the number of medical and paramedical personnel. At present, orthopedic surgeons are seeing from 40 to 70 out-patients in a half-day session (on paper, 3½ hours). Many surgeons are operating 12 to 20 cases per operating day. Despite this, there are waiting lists for elective orthopedics that run from approximately a month in some of the London hospitals to a year in the Portsmouth area, and up to four years in Manchester. I found a curious paradox where on the one hand the orthopedic surgeons felt it absolutely necessary to maintain waiting lists for fear they would never get the increase in staff and beds that they felt necessary for providing optimum care, yet almost to the man there was no desire for an increase in the number of qualified orthopedic surgeons, now running approximately one per 100,000 patients. I was repeatedly told that 50 to 70 beds were optimum for each con-

continued on page 853

Dr. Clawson is professor and Chairman, Department of Orthopedics, University of Washington School of Medicine.

when bursitis hits a 280–lb. tackle, hit back with Butazolidin alka

Indications: Osteoarthritis, rheumatoid arthritis, rheumatoid spondylitis, psoriatic arthritis, acute gout, painful shoulder (peritendinitis, capsulitis, bursitis and acute arthritis of that joint), acute superficial thrombophlebitis.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ul-

For 280-lb. tackles—or 108-lb. housewives—Butazolidin alka can hasten recovery from the agonizing pain of shoulder bursitis.

It's not for every patient. Check carefully the Contraindications, Warning and Precautions shown below.

And adverse reactions may occur. The most common are nausea, edema and rash. Rarely, agranulocytosis has been reported. All adverse reactions are listed below, too.

Play-for-pay or workaday patients—when they come up with shoulder bursitis and your clinical judgment indicates Butazolidin alka—go with it.

And watch the comeback.

cer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur. 6509-V(B)R2

Butazolidin® alka

Capsules

100 mg.	phenylbutazone
100 mg.	dried aluminum hydroxide gel
150 mg.	magnesium trisilicate
1.25 mg.	homatropine methylbromide

Dosage in painful shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

For complete details, please see full prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, New York

PRESIDENT'S *page*

Seminars Will Bring Leadership

LUCIUS D. HILL, III, M.D.

How medicine should be practiced in this country has been the main topic of recent high-level conferences between officers and executive staff of your Association with members of commissions representing a broad cross section of the economy. The consensus of these individuals, representing labor, management, industry, government, education and the news media, is that a drastic overhaul in the health field is not only needed but is forthcoming.

Government-sponsored regional programs, commissions appointed by the President making direct recommendations, and prominent leaders in all fields are agreed that the private practice of medicine is not bringing new technology to the people as rapidly and as inexpensively as it should. Many of these consultants consider the individual physician to be an applied biologist—a polite word for technician—who does not see the "big picture" in regard to socioeconomic problems of health care. They believe further that unless the physician changes his mode of operation, he will be bypassed in the planning process and thereby relegated to a lower level than he now occupies. Those who do not believe that this is coming should look to our neighbor directly to the north—British Columbia. Who would have believed 10 years ago that British Columbia today would have complete socialization of medical care? Yet this has come to pass much faster than was predicted. If the physician is to maintain any autonomy, he must learn to operate within the cooperative arrangements that are building up around him. He must cope with the managerial process and understand the new organization of the so-called health team. If he is unable to do this, he will find himself an applied biologist or technician, at the bottom of the ladder, instead of occupying the position of general of the health team.

On the other hand, if the physician does master the new approach to medical care and becomes a leader in solving the socioeconomic barriers that presumably stand between the patient and the new technology, he will find himself general or captain of the health team—a position in which his decisions and his talents will have the utmost effect.

To this end your Association has transmitted copies of our report on Foundation activities to members of the President's Commission on Health Manpower. In particular, we have transmitted this information to Dwight Wilbur, the AMA representative on this Commission, and to Erwin Miller, Chairman of the Commission. We have been pleased with the reception this information has received. One member of the Commission was surprised and impressed that the state of Washington has dealt with socioeconomic problems in medicine for the past 30 years. Similarly, our expertise in the prepaid physician-sponsored plans is a good example of the desire and ability of physicians in this area to make medical care available. We emphasize that this type of approach could flourish and could answer the needs that theoretically exist, if encouraged by foundations, government, labor and management. It could be done without sacrificing free choice of physician or initiative and innovation that exist under what is loosely termed "free enterprise." In this interest, the Foundation applied for and received a grant to educate physicians in this state in the planning process. Soon, we will be organizing seminars to which key people throughout the state will be invited to study in depth the planning process with particular reference to Public Law 89-749 or the Comprehensive Health Planning Act. By conducting such seminars, we take the first step toward providing the leadership due the physician in any evolving cooperative arrangement. We foresee no reason why the doctor should not remain the leader of the health team, with the opportunity to do more for his patient than at any time in the past. ■

Lucius Hill M.D.

continued from page 849

sultant, and that this number could be well handled with two registrars (assistant residents) and one senior registrar (chief resident). It was generally felt that more consultants would dilute the interesting material and thus make the positions less desirable.

Another paradox that struck me was that while the cost of the Health Service was running so high that much-needed modernization programs could not be funded, the average length of hospitalization in 1965 for all types of patients was 30 days. This increase in hospitalization time over American standards is justified by the fact that it does not cost the individual patient more (directly) and, certainly, I found that patients and their families preferred the prolonged hospitalization as it meant no economic loss and was a great convenience. All consultants felt they were overworked, as indeed they are, but their answer to the problem was the addition of more registrars or full-time hospital staff for positions not qualified as specialists who would have to work under the specialist on a permanent basis.

The "brain drain" was a source of constant concern and irritation to everyone; yet there was little evidence that anything was being done to correct the basic cause that produces this drain. My early impression that it was caused by economics was soon dispelled as I talked to many students, residents, and consultants. It appears to be strictly from a lack of opportunity for the average young man or woman in medicine to reach his full potential under the present system. I was told by a group of students in Glasgow that four of five graduating seniors took the ECFMG for "insurance purposes" and that now nearly 50 per cent of each graduating class was emigrating. This emigration is even better understood in talking to top men in registrars' positions who will surely go on to obtain the best consultant posts in the country, yet who are very disenchanted with the system. There is no normal course of study that a man can undertake to become a consultant. He must try to second guess the selection committee as he attempts to get the best training possible to make him the most attractive candidate. In the surgical areas, this usually means two or three years as a house officer (intern), three to five years as a registrar (assistant resident), moving frequently on a year-to-year basis, seeking the best jobs available and, if lucky, two to four years as a senior registrar (chief resident). There are three registrars for every senior registar position, which is the big block. It is difficult for those of us used to the parallel system of resident education to understand why so many consultants feel that the addition of more registrars to the National Health Service is the answer to the large patient load.

Teaching as we know it in our residency programs is virtually non-existent. The registrar learns in a preceptorship, working in the clinics and assisting in surgery while gradually assuming more and more of the responsibility for patient care and operative procedures. Certainly, at the close of his training he has had a wealth of clinical experience and, for the most part, is a very capable operating surgeon. Even when he is appointed to a consultant's post he will enter in a junior capacity to the more senior men on the staff, and is expected to fall into the previously-established patterns of awaiting his turn and reaching a chief-of-service position in his 50's.

The National Health Service's sole concern up to the present has been the dispensing of medical care and, hence, registrars or consultants must carry out any research activity on their own time and suffer significant financial loss. Research is the responsibility of the Medical Research Council and while grants are available for outstanding individuals, this type of appointment does take the man out of the mainstream as far as clinical advancement and its accompanying financial rewards are concerned. While our system of providing an opportunity for virtually every student to do research is obviously a financial waste to the government or university, it appears to me that only through such a system can the individual suited for a productive research career be identified early and allowed to reach his maximum potential.

Much thought and effort have gone into the development of accident services, as injuries are accounting for an increasing number of hospital admissions. Inasmuch as 70 per cent of these patients have musculoskeletal trauma, the units in the larger centers are run by the department of orthopedics, with the department of anesthesiology assuming the primary responsibility for treatment of shock and resuscitation. These units for the most part are modern, well equipped, and well run. Quite obviously, with three to six orthopedic surgeons for cities of 300,000 to 500,000 people, it is not possible for them to be in constant attendance. Therefore, much of the emergency surgery is done by house officers and registrars. X-rays are reviewed daily and the cases seen on ward rounds and the consultants can be available, which does give a level of quality control.

Quite obviously, the most difficult area to assess is quality, for it does not lend itself well to statistics, but certainly the standard of orthopedic care in the major medical centers I visited was very good. What is most lacking may to some be considered frills: private or semi-private rooms, the personal attention of the doctor of choice, or the little extra time to sort through the patient's problems, real or imiginary, which is just not available. This situation, understandably, accounts for the rise of private hospitals (called nursing homes) and private insurance programs. The fact that an ever increasing number of people in the more affluent section of the society will pay the 36 to 53 pounds per family per year when medical care is free in order to obtain medical insurance indicates some disillusionment in the present system. The thought that there could be two standards of care, of course, has been unacceptable to socialistic thinking, yet the British government apparently has accepted the fact that the costs of providing personalized private type care are more than they are able or willing to spend.

I have not written these comments either in commendation or criticism, for no system is ideal and we each have a great deal to learn from other countries in providing medical care. If there is a lesson to learn, and I believe there is, it is simply that regardless of the indirect costs through taxation, regardless of the inconveniences or lack of personalized service, the British citizens are basically happy with their system of medical care and their American counterparts are unhappy with the direct costs they must bear for each illness. I am sure a form of government-subsidized medical care will soon be available for all citizens, for it is politically expedient and has many desirable features. If organized medicine will take the leadership in establishing actuarially sound programs, we will be able to obviate the undesirable effects of a politically inspired, bureaucratically controlled medical care scheme. ■

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X-Ray of the Month on Page 829

Ectopic right kidney in pre-sacral position with obstruction by calcullus at the uretero-vesicle junction.

Note the circular densities projected over the sacrum which represent distended calices of the ectopic right kidney. The dilated short right ureter parallels the pelvic brim, and intersects the calcific stone.

An uncrossed ectopic kidney occurs in one of 800 individuals and of these a third show other developmental anomalies.

Such a kidney has been arrested somewhere along its normal course of ascent during fetal development, and it may lie in any location between the bladder and the normal renal site. The abnormal position is maintained by anomalous multiple vascular attachments, representing persistence of the renal blood supply of early fetal life.

Ectopic kidney is of clinical importance because of the high frequency of associated infection and calculus formation. In addition, its presence in the female pelvis simulates an ovarian or uterine neoplasm.

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Your patients can purchase Allbee with C capsules in the convenient bottle of thirty—a month's supply at a very reasonable price. Also the economy size of 100. Available at pharmacies everywhere on your prescription or recommendation.

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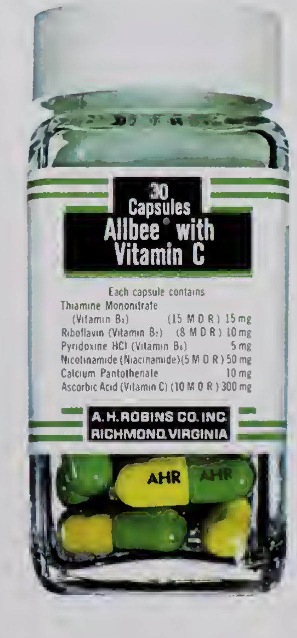
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phenobarbital	(¼ gr.) 16.2 mg.	(¾ gr.) 48.6 mg.
(Warning: may be habit forming)		

Brief summary. Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction. Contraindicated in acute glaucoma, advanced renal or hepatic disease or a hypersensitivity to any of the ingredients.

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OREGON
PORTLAND
SEPT 19-22
1967

JOHN E. TYSELL, M.D.

Eugene

President

President's Invitation

Our Association's annual meeting always offers us a unique combination of events. First, a scientific program of unusually wide interest and excellence awaits us. It will offer presentations on heart disease, renal dialysis, medical uses of the computer, and a timely discussion of the Heart, Cancer and Stroke Regional Medical Program in Oregon.

The House of Delegates will be meeting concurrently to consider the Association's business affairs. I cordially invite our members to attend. Of particular interest are the reference committee meetings, where one can either view or participate in democracy in action.

This year, we are trying something new—there will *not* be an annual banquet and inaugural ball. Instead, we are holding the annual business meeting and elections as a part of the Scientific Program. Beginning at 11:30 a.m. on Friday, September 22, we will elect our officers, install our new President, Glenn M. Gordon, and present the Association's annual awards. I am most anxious that there be good attendance at this meeting. It will be followed by a reception in honor of our newly installed and elected officers.

I hope to see you at the 1967 annual session. ■

Oregon Medical Association

GLENN M. GORDON, M.D.
Eugene
President-Elect

HANCE F. HANEY, M.D.
Portland
Vice-President

ALFRED C. HUTCHINSON, M.D.
Portland
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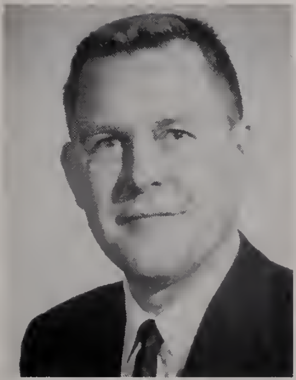
MAX H. PARROTT, M.D.
Portland
AMA Trustee

93rd Annual Session of the Oregon Medical Association

CLINTON S. McGILL, M.D.
Portland
Speaker of the House

Officers 1967



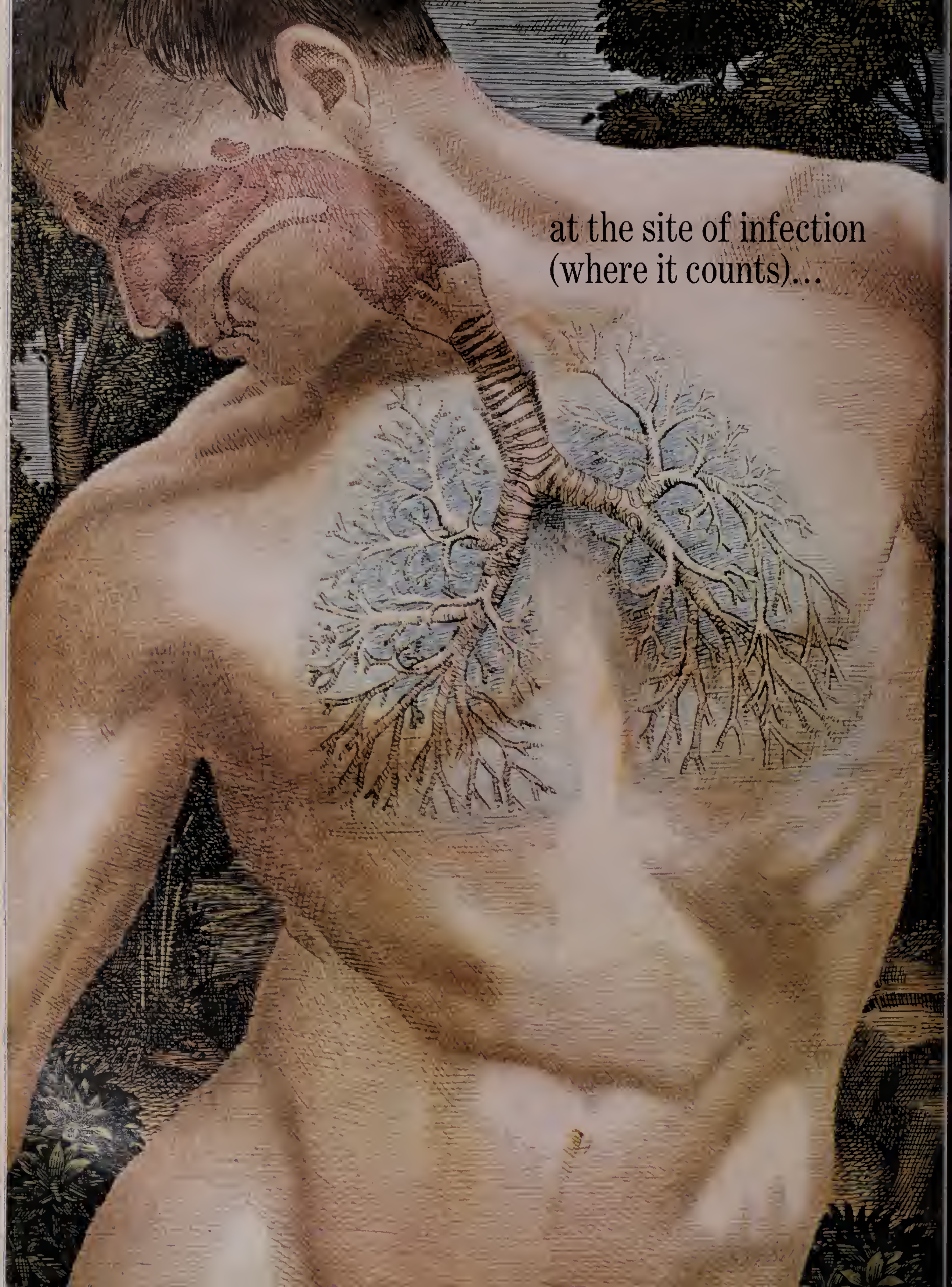
BLAIR J. HENNINGSGAARD, M.D.
Astoria
Delegate to AMA

ERNEST T. LIVINGSTONE, M.D.
Portland
Delegate to AMA

JAMES H. SEACAT, M.D.
Salem
Alt. Delegate to AMA

DANIEL K. BILLMEYER, M.D.
Oregon City
Alt. Delegate to AMA

continued on page 864


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

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Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Now available:
New! Ready-mixed Ilosone Liquid 125! (Contains erythromycin estolate equivalent to 125 mg. erythromycin base per 5-cc. teaspoonful.)

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Ilosone® Lilly
Erythromycin Estolate

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by microorganisms sensitive to its action (especially staphylococci, hemolytic streptococci, and pneumococci). The drug is therefore useful in a high proportion of bacterial diseases encountered in clinical practice and particularly in the treatment of bacterial infections of the upper and lower respiratory tract and soft tissues.

In the treatment of acute bacterial pharyngitis and tonsillitis, this antibiotic has promptly eradicated the bacteria (streptococci) and has produced a parallel prompt clinical improvement. There have been no group A beta-hemolytic streptococci resistant to this preparation. In beta-hemolytic streptococcus infections, treatment should be maintained for ten days to prevent the development of rheumatic fever or glomerulonephritis.

Erythromycin estolate has proved to be very effective in pneumococcus pneumonia and in acute bronchitis with pneumococci on culture. Bronchopneumonia and otitis media in children have responded well to its use.

The antibiotic has been used very successfully in staphylococcus infections. Good therapeutic results have been obtained in soft-tissue infections, abscesses, cellulitis, carbuncles, wound infections, and furunculosis.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents. As is the case with any treatment regimen used in these severe conditions, surgical procedures should be performed when indicated, and large dosages of the antimicrobial agents should be employed. In this fashion, Ilosone has been effective in staphylococcus pneumonia, osteomyelitis, septicemia, empyema, and meningitis.

Multiple 500-mg. doses of the drug have also been useful in gonorrhea and syphilis. Since penicillin is the drug of choice for the treatment of syphilis and gonorrhea, erythromycin estolate should be employed for these infections only in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients known to be hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Ilosone is contraindicated in patients with a known history of sensitivity to this drug and in those with preexisting liver disease or dysfunction.

Adverse Reactions: Data obtained from seven years' use of propionyl erythromycin ester and erythromycin estolate (Ilosone) indicate that hepatic dysfunction with or without clinical jaundice may occur during or following courses of therapy with the drug.

Changes in liver function tests in such cases have been indicative of intrahepatic cholestasis. The symptoms appear to be the result of a form of sensitization. The initial symptoms have developed in some cases after a few days of treatment but generally have followed one or two weeks of continuous therapy or several courses of the drug. Symptoms reappear promptly, usually within forty-eight hours, if the drug is readministered to sensitive patients. Eosinophilia was noted in peripheral blood counts. The findings readily subsided without apparent residual effects when treatment was discontinued. Recovery was delayed in one reported instance. The physician indicated in this case that either drug-induced jaundice or viral hepatitis may have been responsible for the findings.

In one clinical study involving ninety-three patients treated with the antibiotic, three cases of jaundice were observed and an additional eleven cases developed some changes in liver function tests. Three of the patients had abnormal liver function tests a second time on readministration of the drug.

Even though it is assumed that not all cases of jaundice have been reported, it seems clear that the number is small compared with the amount of drug that has been used. Reported cases have included persons in whom there had been administered other drugs known to be associated at times with hepatic side-effects and cases in which the presence of viral hepatitis or other disease may have been responsible for the findings. In some of the cases, associated gastro-intestinal symptoms simulated the colic of biliary tract disease. In other instances, clinical symptoms and results of liver function tests resembled findings in extrahepatic obstructive jaundice. It appears that the occurrence of jaundice after administration of Ilosone is infrequent, but further investigations are being made to estimate its incidence more accurately.

In those cases mentioned above in which jaundice appeared to be definitely related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Individual idiosyncrasy seems evident since jaundice has not been reported in other patients taking prolonged courses of the medication. Patients with chronic infection have been given 1 to to 2 Gm. of the drug daily for periods of two to six months, and patients with rheumatic fever have taken prophylactic doses of 0.5 Gm. daily for two years without difficulty. In one group of 144 patients who received the drug daily for two years, no jaundice was noted. It was of interest that members of six of these patients' families, who were not taking the drug, had episodes of jaundice during the study period.

Transaminase and serum alkaline phosphatase levels were determined in a group of fifty-four adults and children who took 250 mg. of Ilosone daily for an average of sixteen months as rheumatic fever prophylaxis. The results were compared with those of a similar group of forty-four patients who received penicillin. There were no cases of jaundice in either group. Elevation of SGPT and serum alkaline phosphatase levels during the course of treatment was observed in one patient treated with Ilosone and in two patients treated with penicillin. Seven other patients in the group receiving Ilosone and four others in the penicillin group showed elevations in one of the tests at some time during administration of the drugs.

Very satisfactory therapeutic results, without toxicity, were reported in 102 pediatric patients who received short-term (ten-day) courses of Ilosone in the treatment of streptococcus infections. Results of liver function tests in these patients were comparable to those in a similar control group who had received penicillin.

Gastro-intestinal disturbances not associated with hepatic effects are observed in a small proportion of individuals as a result of a local stimulating effect of the medication on the alimentary tract; however, the normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Although allergic manifestations are uncommon with the use of erythromycin, there have been occasional reports of urticaria, skin eruptions, and, on rare occasions, anaphylaxis.

Administration and Dosage: Ilosone is administered orally.

Ilosone Pulvules®, Ilosone Liquid 125, Ilosone, 125, for Oral Suspension, Ilosone Drops, Ilosone Chewable Tablets.

For infants and for children under twenty-five pounds of body weight, the usual dosage is 5 mg. per pound every six hours; for children twenty-five to fifty pounds, 125 mg. every six hours. (Tablets Ilosone Chewable should be chewed or crushed and swallowed with water.)

For adults and for children over fifty pounds, the usual dosage of Ilosone is 250 mg. every six hours.

For severe infections, these dosages may be doubled.

When larger doses are indicated, parenteral erythromycin therapy should be considered.

In the treatment of syphilis, the recommended total dosage is 20 to 30 Gm. given in divided doses for a period of ten to fifteen days. Close follow-up of the patient is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examinations of spinal fluid are recommended as part of the follow-up therapy.

For gonorrhea, 500 mg. four times a day for four days are recommended. In the treatment of gonorrhea, patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics, and monthly serologic tests should be made for a period of three months.

How Supplied: Pulvules Ilosone, Capsules, N.F., 125 and 250 mg. (equivalent to base), in bottles of 24 and 100.

Ilosone Liquid 125, Oral Suspension, U.S.P., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60-cc. and pint-size packages.

Ilosone, 125, for Oral Suspension, N.F., 125 mg. (equivalent to base) per 5-cc. teaspoonful, in 60 and 150-cc.-size packages.

Ilosone Drops, 5 mg. (equivalent to base) per drop, in 10-cc.-size packages, with dropper calibrated at 25 and 50 mg.

Tablets Ilosone Chewable, N.F., 125 mg. (equivalent to base), in bottles of 50. [032767]

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request.
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continued from page 859

SOMMER MEMORIAL LECTURERS

PAUL S. RUSSELL, M.D.
Professor of Surgery
Massachusetts General Hospital
Boston, Massachusetts

AXEL N. ARNESON, M.D.
Professor of Ob-GYN Dept.
Washington University
St. Louis, Missouri

JOHN P. MERRILL, M.D.
Director Cardio-Renal Section
Peter Bent Brigham Hospital
Boston, Massachusetts

SCIENTIFIC THEATRE

Medical motion pictures will be shown in the Coliseum's Simpson Room. The Annual Meeting program will carry a schedule of the films to be included.

Memorial Colisium will serve as headquarters of the OMA 93rd Annual Session.

93rd Annual Session
of the
Oregon Medical Association
DAILY CALENDAR

Tuesday, September 19

6:00 p.m. Dinner Meeting, House of Delegates—U.S. Plywood Room

Wednesday, September 20

7:00 a.m. Breakfast Meeting, House of Delegates—U.S. Plywood Room

Morning Scientific Session—Georgia Pacific Room

9:00 a.m. *Jogging*—Waldo E. Harris, M.D., and Mr. William J. Bowerman

9:30 a.m. *The Mechanism of Tissue Rejection*—Paul S. Russell, M.D.

10:30 a.m. Recess to visit Technical, Scientific and Art Exhibits

11:00 a.m. *A Use for the Computer in Medical Decision Making*—Lee B. Lusted, M.D.

11:30 a.m. *The Oregon Regional Medical Program for Heart, Cancer, Stroke and Related Diseases* (Public Law 89-239)—Herman A. Dickel, M.D. and M. Roberts Grover, Jr., M.D.

1:00 p.m. Annual Meeting of Section of Preventive Medicine—Pope and Talbot Room

Afternoon Scientific Session—Georgia Pacific Room

1:30 p.m. *The Current Management of Middle Ear Disease*—John M. Epley, M.D.

2:00 p.m. *Bronchoscopy for Emphysema Patients*—J. Karl Poppe, M.D.

2:30 p.m. *The Present Status of Renal Transplantation*—John P. Merrill, M.D.

3:30 p.m. Recess to visit Technical, Scientific and Art Exhibits

4:00 p.m. *Special Interest Cases Among Patients with Cervical Cancer*—Axel N. Arneson, M.D.

5:15 p.m. Social Hour—Honoring Exhibitors—Fountain Room

6:30 p.m. Annual Dinner—Oregon Medical Political Action Committee—Mayfair Room—Benson Hotel

93rd Annual Session
of the
Oregon Medical Association

Thursday, September 21

Morning Scientific Session—Georgia Pacific Room

9:00 a.m. *The Treatment of Chronic Renal Failure*—John P. Merrill, M.D.

10:00 a.m. Recess to visit Technical, Scientific and Art Exhibits

10:30 a.m. *The Status of Renal Dialysis in Oregon Today* (Panel Discussion) Otto C. Page, M.D., Moderator; John P. Merrill, M.D., John E. Tysell, M.D., Richard F. Drake, M.D., Mr. Charles Foster, Executive Director, Kidney Association of Oregon, Portland; Mr. Earl Rice, Administrator, Seattle Artificial Kidney Center; Rev. J. Dwight Russell, Portland, Executive, Synod of Oregon, United Presbyterian Church of the U.S.A.

Afternoon Scientific Session—Georgia Pacific Room

1:30 p.m. *Double Primary Lesions in Cancer of the Cervix*—Axel N. Arneson, M.D.

2:30 p.m. *Paradoxical Loss of Urine in Women with Incarcerated Retrodisplaced Gravid Uterus*—M. L. Pernoll, M.D.

3:00 p.m. Recess to visit Technical, Scientific and Art Exhibits

3:30 p.m. *Overcoming Transplant Rejection*—Paul S. Russell, M.D.

4:30 p.m. *Transluminal Recanalization: Percutaneous Technique for Treating Occlusive Disease of the Leg Arteries*—Charles Dotter, M.D.

Hear
The Honorable Dan Evans
Governor of Washington
at the
OMPAC Banquet

Wed., Sept. 20
6:30 p.m. Social
Mayfair Room

7:30 p.m. Dinner
Benson Hotel
7.50 per plate

93rd Annual Session of the Oregon Medical Association

Friday, September 22

7:00 a.m. Breakfast Meeting, House of Delegates—U.S. Plywood Room

Morning Scientific Session—Georgia Pacific Room

9:00 a.m. *The Evolution of Radium Dosimetry in Pelvic Cancer*—Axel N. Arneson, M.D.

10:00 a.m. Recess to visit Exhibits

10:30 a.m. *Clinical Transplantation and Some Thoughts for the Future*—Paul S. Russell, M.D.

11:30 a.m. Oregon Medical Association General Business Session; Annual Election of Officers; Presentation of Doctor-Citizen and Press Awards; Installation of 94th President

12:30 p.m. President's Reception—Fountain Room

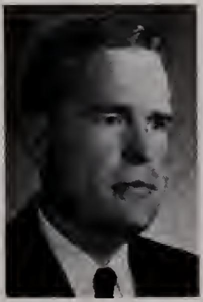
Afternoon Scientific Session—Georgia Pacific Room

2:00 p.m. *Advances in our Knowledge of Glomerulonephritis*—John P. Merrill, M.D.

3:00 p.m. Recess to visit Exhibits

3:30 p.m. *Continuous Telemetered Electrocardiograms During Cadiac Syncope*—Herbert J. Semler, M.D.

4:00 p.m. *Newer Treatment of Congestive Heart Failure* (Panel Discussion) George A. Porter, M.D., Moderator; John P. Merrill, M.D., Frank E. Kloster, M.D. William Bennett, M.D., Kenneth B. Cairns, M.D.



President's Installation and Reception

and Award Ceremonies

11:30 a.m. . . . Friday, Sept. 22

Honoring OMA President, Glenn M. Gordon, M.D., and Award Winners

Installation Ceremonies . . . Georgia Pacific President's Reception . . .

Weyerhaeuser Room

SPECIAL EVENTS

House of Delegates

This is the major policy-forming body of the Oregon Medical Association and is composed of delegates from each of its component societies and members of the Board of Trustees. Clinton S. McGill of Portland, Speaker of the House, invites all members of the Association to attend its meetings and to participate in the deliberations of its Reference Committees. The House will convene first at a dinner on Tuesday, September 19, in the U. S. Plywood Room of the Memorial Coliseum. It will also hold 7 a.m. breakfast meetings on September 20 and 22. Its Reference Committees will meet on Wednesday and Thursday in conference rooms at the Memorial Coliseum, Portland.

OMPAC Banquet

Hear the honorable Dan Evans, Governor of the State of Washington, at the Annual OMPAC Banquet, Wednesday, September 20, 1967, Mayfair Room, Benson Hotel. According to Merle Pennington, Chairman of OMPAC, this popular event promises to be a stimulating and entertaining program. The social hour will begin at 6:30 p.m. with banquet and program commencing at 7:30 p.m. This presentation by Governor Evans is his first major appearance in Oregon. Open to all physicians and friends, OMPAC Banquet tickets are available at $7.50 per plate.

Physicians Screening Examinations

The biggest of the scientific exhibits will be the Physicians Screening Examination exhibit presented by Multnomah County Medical Society. Physicians will be invited to have a screening examination. Included will be ophthalmological, cardiovascular, pulmonary and abdominal examinations. The purpose of the screening exam is to remind physicians to have a complete yearly physical. The exhibit will be open to all registered physcians between 10 a.m. and 4 p.m. on Wednesday, Thursday and Friday in Exhibit Hall, Memorial Coliseum.

Little Scientific Treatre

Scientific dimension to the Annual Session will be created by the several video presentations on various scientific subjects. Check the registration-information center for the showing schedule of the Little Scientific Theatre to be held in the Simpson Room.

President's Reception and Awards Ceremonies

The President's Installation and Reception and Award Ceremonies constitute a major change in the format of this year's Annual Session. Incoming OMA President Glenn M. Gordon, Eugene, will be installed during the Installation and Awards Ceremony at 11:30 a.m., Friday, September 22, in the Georgia-Pacific Room. Other awards will be presented at this time such as the naming of the "Doctor-Citizen of the Year," the recognition of the annual press awards—both editorial and news reporting, as well as other acknowledgments consistent to the Annual Session. A new innovation to the occasion will be the President's reception which will follow the Awards Ceremonies in the Weyerhauser Room. Plan to attend this special event and salute the Association leadership as well as honor those whose contributions are to be acknowledged.

Oregon Medical Golf Tournament

All interested duffers and par-shooters are encouraged to make application for the Annual Golf Tournament scheduled for Saturday, September 23. Golfing physicians should watch their mail for application forms and announcement of course and tee times. Foursomes may be arranged ahead of time or can be arranged on the first tee. The low net winner carries off the Association trophy, and numerous other prizes will be awarded.

Exhibits

Plan to see the many technical and scientific exhibits that are an integral part of the postgraduate education opportunity provided at the annual session. New drugs, new services and new ideas will be offered by our technical exhibitors. In the scientific exhibits, OMA members bring important facts from their experience in medical practice that lend themselves better to display than to formal lecture-type presentations. The Seventh Annual Physicans Art Exhibit will be especially interesting. Be sure to visit every exhibit in all three categories. Special prizes will be awarded to physicans who visit the technical exhibits.

HULDRICK KAMMER, M.D.

Portland
Chairman of Scientific Program
Committee on Annual Session

Committee On Annual Session

Hance F. Haney, Chairman, Portland
William D. Guyer, Bend
Leonard D. Jacobson, Eugene
Ralph E. Hibbs, Medford
John W. Bussman, Portland
Peter DeWitt, Portland
Myron R. Grover, Jr., Portland
Huldrick Kammer, Portland
Thomas R. Montgomery, Portland
Arthur L. Rogers, Portland

Technical Exhibitors

The OMA wishes to extend its appreciation for the support of the following exhibitors, constituting a partial list of those organizations who add dimension to the meeting:

Haack Laboratories, Inc.
Audio-Digest Foundation
International Business Machines
Julius Schmid, Inc.
Mead Johnson Laboratories
Flint Laboratories
Milex-Western Company
Ciba Pharmaceutical Company
Neely Sales Division
Loma Linda Foods
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Usher Medical Equipment
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Ayerst Laboratories
The Stuart Company
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Exercycle of Oregon & Washington

1967 Necrology
Oregon Medical Association

September 27, 1966	Robert Donovan Coe Myrtle Point	*March 17, 1967	Jules V. Napier Portland
October 6, 1966	Wm. Boyd Mott Salem	April 17, 1967	Philip B. Potampa Portland
*October 30, 1966	Samuel D. Earhart Milwaukie	*April 25, 1967	Daniel C. McDonald Portland
*November 3, 1966	Max Himmelfarb Portland	*May 1, 1967	A. N. Johnson, Sr. Roseburg
*November 12, 1966	Harry E. Shoot Portland	*May 10, 1967	Oliver M. Nesbitt Portland
**November 18, 1966	Arrin R. Richard Hess Tacoma	*May 15, 1967	Paul H. Homann Portland
**November 22, 1966	Fred T. Rucker Newberg	*May 19, 1967	Hubert F. Leonard Portland
*December, 10, 1966	Alfred B. Peacock Eugene	**May 26, 1967	W. Ross Eaton Oregon City
*December 28, 1966	John A. Hardiman Portland	*June 2, 1967	Harley R. Shields Portland
*December 28, 1966	Paul B. Hansen Portland	*June 4, 1967	Harry J. Anderson Corvallis
*January 24, 1967	Erwin H. Barendrick Laguna Hills, California	**June 9, 1967	Benjamin F. Giesy Aurora
February 11, 1967	Clyde R. Walker Portland	*June 10, 1967	Adolph Weinzirl Portland
*February 15, 1967	Dick R. Ross Salem	*June 18, 1967	J. I. Codd Tillamook
*February 18, 1967	Paul F. Lacy Portland	*June 23, 1967	Richard E. Turner Springfield
*March 8, 1967	Roy A. Harcourt Portland	*June 24, 1967	J. Carle Rinehart Portland
March 8, 1967	Frederick S. Salisbury Portland	*July 1, 1967	F. Howard Kurtz Salem
*March 14, 1967	Thomas A. Davis Portland	*July 5, 1967	Charles Glasgow Robertson Salem
**March 15, 1967	John Barton Riverside, California	*July 7, 1967	Clarence M. Young Portland
*March 15, 1967	J. C. Vandevert Bend	*July 29, 1967	Burton Arland Carlock Enterprise

*denotes OMA member

**denotes former OMA member

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MRS. WILLIAM (JO) LEHMAN
Milwaukie
President-Elect

Woman's Auxiliary to the Oregon Medical Association

MRS. WILLIAM (GLORIA) ZARTMAN
Beaverton
President

Fall Session

September 19
6 p.m.—Social Hour; No host dinner—Thunderbird
September 20
Art Exhibit—Coliseum
11 a.m. Champagne Opening and Reception honoring artists
12 Noon Champagne bus leaves for Salem and dedication of Med-Aux Park II
2 p.m. Dedication of Med-Aux Park II, Secretary of State Clay Meyers officiating
7:30 p.m. OMPAC Banquet featuring Gov. Dan Evans, Mayfair Room, Benson Hotel, Social Hour, 6:30 p.m.
September 21
8 a.m. Breakfast—Presidents—Past Presidents, Presidents-elect, and County Presidents; Cosmopolitan Motor Inn, Top of Cosmo dining room
9 a.m. River Queen, Plush Bottom, Coffee and Rolls, Registration
9:30 a.m. Election and Installation of Officers
12:30 p.m. Social Hour
1 p.m. Luncheon—speaker, Bernice C. Sachs, Seattle, *Women's Destiny — Choice or Chance*
2:45 p.m. Little Workshop; Two-way discussion of old and new
September 22
11:30 a.m. OMA President's Installation and Awards Ceremony; Coliseum, Georgia-Pacific Room
12 Noon President's Reception honoring Glenn M. Gordon, 94th President Weyerhaeuser Room, Memorial Coliseum

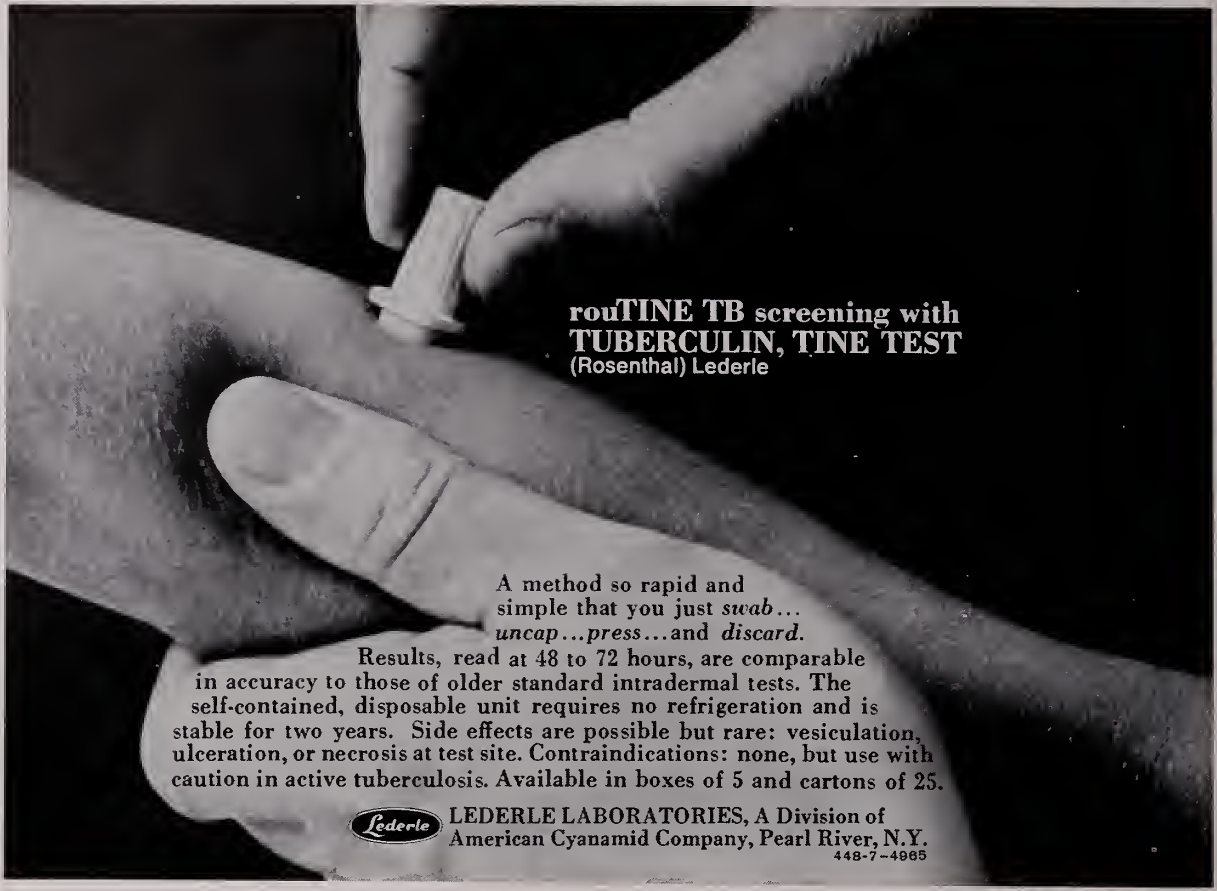
Doctor's Wife

Distribution of the popular "Doctor's Wife" rose, sponsored by the Woman's Auviliary to the Oregon Medical Association, has now helped to construct playground facilities at two schools for retarded children.

The salmon pink, hybrid tea rose was introduced nationally last June at the 1967 National Convention of the Auxiliary in Atlantic City. The idea caught on and orders for the rose are now coming into the Oregon Chapter from across the nation.

The first playground, Med-Aux Park I, was dedicated on September 28, 1966, at a school for retarded children in Aloha, Oregon. Facilities at a second school, in the Salem area, have now been completed. Dedication of Med-Aux Park II, named Shangri-La, is scheduled to take place September 20.

Further success of the Auxiliary's project depends on the continued distribution of the Doctor's Wife rose. You can help out by making a contribution to Med-Aux Park, Inc. A contribution now will insure delivery by proper planting time.



A method so rapid and simple that you just *swab... uncap...press...*and *discard.* Results, read at 48 to 72 hours, are comparable in accuracy to those of older standard intradermal tests. The self-contained, disposable unit requires no refrigeration and is stable for two years. Side effects are possible but rare: vesiculation, ulceration, or necrosis at test site. Contraindications: none, but use with caution in active tuberculosis. Available in boxes of 5 and cartons of 25.

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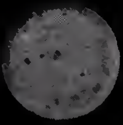
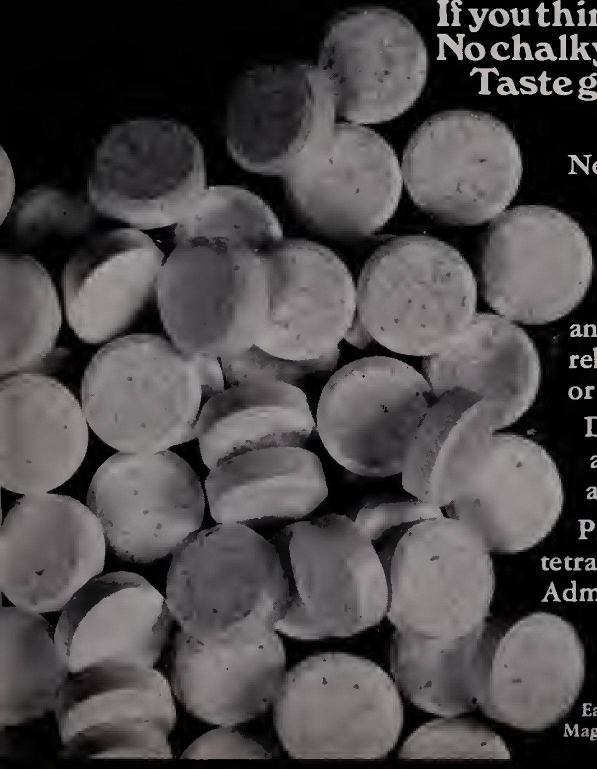
MEDICAL STAFF

John R. Montague, M.D.
Merle M. Kurtz, M.D.
Marvin J. Weinstein, M.D.
Norris H. Perkins, M.D.,

John W. Evans, M.D.,
Consulting Psychiatrist
Physicians





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will neutralize one-half glass (4 oz.) of 0.1 *N* HCl.
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Neosorb Plus Tablets are chewable with no chalky aftertaste, and have a delicate spearmint flavor for excellent patient acceptance, week after week.

For your patients with gastric hyperacidity or ulcer syndrome, give Neosorb Plus Tablets with the fast, protective and long-lasting antacid action. They do not cause acid rebound or electrolyte imbalance and are free of constipating or laxative effects.

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Supplied: Bottles of 100 tablets.

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WINE ADVISORY BOARD, DEPT. C1, 717 MARKET ST., SAN FRANCISCO, CALIF. 94103

continued from page 791

9:50 a.m.	Acute Ventilatory Failure Associated with Bronchial Asthma	Dr. Mansmann
10:50 a.m.	Correlation of Smoking by Parents and Respiratory Diseases in Small Children	Kit Johnson, M.D.
11:10 a.m.	Alum Precipitated Pyridine Extracted Allergens	Dr. Mansmann
11:40 a.m.	Hyposensitization in Children; Which Children Deserve Hyposensitization; Length of Treatment???	John Stevenson, M.D., Daniel Billmeyer, M.D., and Dr. Mansmann

Tuesday, Sept. 26

9:00 a.m.	Chemotherapy of Hydrocephalus	David Shurtleff, M.D.
9:15 a.m.	Antimicrobial Prophylaxis	Dr. Wehrle
9:55 a.m.	Use of Controlled Ventilation with the Aid of Muscle Paralysis in Status Asthmaticus	Dr. Mansmann
10:45 a.m.	The Diversity of Immunologic Defects	Ralph Wedgwood, M.D.
11:20 a.m.	Increased Susceptibility to Infection (Round Table)	M. Stephenson, M.D. Jack Benner, M.D. Starkey D. Davis, M.D., and Dr. Wehrle.

Wednesday, Sept. 27

9:00 a.m.	Pseudomas Infection, Treatment with Gentamicin Sulfate	W. R. Peterson, M. D.
9:20 a.m.	The White Blood Count—1967	Nathan I. Smith, M.D.
9:40 a.m.	Differential Diagnosis and Treatment of Meningitis	Dr. Wehrle
10:40 a.m.	PPD, BCG & INH	Starkey D. Davis, M.D.
11:10 a.m.	Antibiotics and Infectious Diseases (Round Table)	M. Stephenson, M.D. Jack Benner, M.D. Starkey D. Davis, M.D., and Dr. Wehrle

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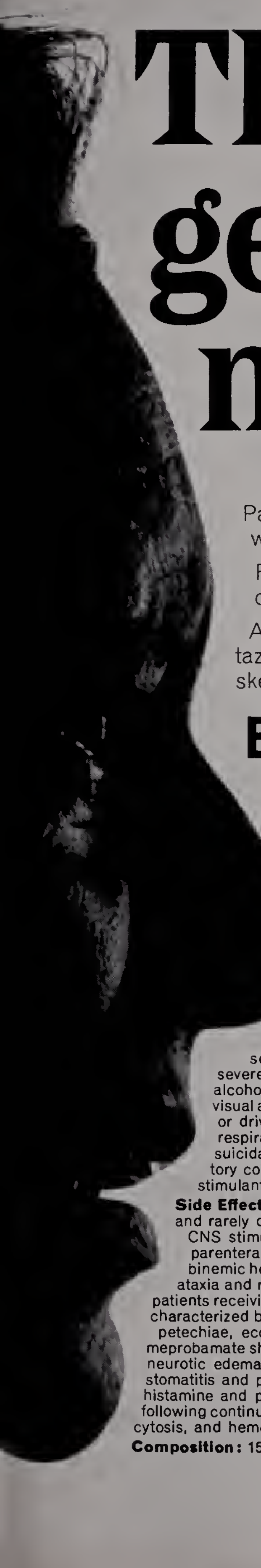

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Contraindications: History of sensitivity or severe intolerance to aspirin or meprobamate.

Warnings: USE IN PREGNANCY: Safety for use during pregnancy or lactation has not been established; therefore it should be used in pregnant patients or women of child-bearing age only when the physician judges its use essential to the patient's welfare.

Precautions: Keep out of reach of children. Not recommended for patients 12 years old or less. Carefully supervise dose and amounts prescribed, especially for patients prone to overdose themselves. Excessive prolonged use of meprobamate may result in dependence or habituation in susceptible persons—as alcoholics, ex-addicts, severe psychoneurotics. Withdraw gradually after prolonged high dosage to avoid possibly severe withdrawal reactions including epileptiform seizures. Warn patients of possible reduced alcohol tolerance. If drowsiness, ataxia or visual disturbances (impairment of accommodation and visual acuity) occur, reduce dose. If symptoms persist, caution patients against operating machinery or driving. After meprobamate overdose, prompt sleep, reduction of blood pressure, pulse and respiratory rates to basal levels, and hyperventilation are reported. Give cautiously to patients with suicidal tendencies. Treat attempted suicide (has resulted in coma, shock, vasomotor and respiratory collapse and anuria) with immediate gastric lavage and appropriate supportive therapy (CNS stimulants and pressor amines as indicated).

Side Effects: Ethoheptazine and aspirin may occasionally cause nausea, vomiting, epigastric distress, and rarely dizziness. Overdosage may result in CNS depression (drowsiness and lightheadedness) or CNS stimulation and salicylate intoxication (requires induced vomiting or gastric lavage, specific parenteral electrolyte therapy for ketoacidosis and dehydration, and observation for hypoprothrombinemic hemorrhage [usually requires whole blood transfusions]). Meprobamate may cause drowsiness, ataxia and rarely allergic or idiosyncratic reactions. These reactions, sometimes severe, can develop in patients receiving only 1 to 4 doses who have had no previous contact with meprobamate. Mild reactions are characterized by urticarial or erythematous maculopapular rash. Acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever have been reported. If allergic reaction occurs, meprobamate should be stopped and not reinstituted. Severe reactions, observed very rarely, include angioneurotic edema, bronchial spasms, fever, fainting spells, hypotensive crises (1 fatal case), anaphylaxis, stomatitis and proctitis (1 case) and hyperthermia. Treat symptomatically such as with epinephrine, antihistamine and possibly hydrocortisone. A few cases of leucopenia, usually transient, have been reported following continuous use. Rarely, cases of aplastic anemia (1 fatal case), thrombocytopenic purpura, agranulocytosis, and hemolytic anemia have been reported; almost always, in the presence of known toxic agents.

Composition: 150 mg. meprobamate, 75 mg. ethoheptazine citrate and 250 mg. aspirin per tablet.

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CLASSIFIED ADVERTISEMENTS

All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than the 15th of the month preceding date of issue. Proof is not shown. Copy of ad as it appeared in the journal accompanies billing.

PRACTICE OPPORTUNITIES

OREGON COASTAL OPENINGS—For two general practitioners. New 41-bed district hospital serving about 6,000 residents. Three physicians at present. Office space and financing available. Richest per-capita city in Oregon. Abundance of recreation and mild climate. Contact Jack W. Cadwell, Administrator, New Lincoln Hospital, Toledo, Ore. 97391.

OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

MEDICAL CENTER IN WESTERN WASH.—Has an opening for an internist and a dermatologist in a medical specialty group. City expanding rapidly with big industry and future outlook very promising. Climate and recreational facilities are excellent. Write Box 15-C Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

NEUROSURGEON—For 65-man Permanente Clinic, Portland, Oregon. Starting income $30,000, Insurance benefits, retirement program, etc. N. W. Frink, M.D., Permanente Clinic 5055 N. Greely, Portland, Oregon 97217.

NURSE ANESTHETISTS— Immediate openings in large teaching hospital, Seattle. Five days Monday thru Friday. No call, no weekend assignments. Please send resume' to Box 37-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

OTOLARYNGOLOGIST—For 65-man clinic servicing the Kaiser Health Plan in Oregon. Starting income $30,000; regular increases for 10 years. Insurance benefits, retirement program. N. W. Frink, M.D., Permanente Clinic, 5055 N. Greeley, Portland, Oregon 97217.

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EXCELLENT GP OPPORTUNITY—To associate with 3 very busy practitioners. One with residency in surgery preferred. Financial arrangements open. Fully equipped office, good hospital facilities. Pacific Northwest, mouth of Columbia River, Astoria, Ore. Write Box 40-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

ALLERGIST—Experienced Allergist preferred, but will train any interested physician. Allergy Clinic in clean, cultural, progressive University city of 300,000, south central Kansas. Research and teaching facilities available. Early partnership. Salary open. Write Box 4-A Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

URGENT NEED FOR PHYSICIANS—Area North - Spokane has openings for 2 GP's, Board or Board eligible surgeons and internists. Competitive income with competent colleagues. Scenic surroundings and year-around recreations. Write Box 3-A Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

GENERAL PRACTITIONER—Wanted to take over practice in small Northeastern Oregon community—near Walla Walla. Gross over $60,000. Excellent hunting, fishing and skiing. Write Box 607, Milton Freewater, Ore. 97862.

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PHYSICIAN WANTED—To become associated with group providing occupational and environmental health services for large atomic energy plant. Opportunity for special projects or clinical research depending on interest and qualifications. Regular hours, excellent living conditions and climate in a Washington State growth area. An equal opportunity employer. Write Box 1-A, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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CONTINUING EDUCATION COURSES

CURRENT CONCEPTS IN CARDIOLOGY—An intensive program with special emphasis on coronary disease, indication and management of valvular replacement, diagnosis and management of cardiac arrhythmias, vector-cardiography and applied cardiovascular physiology. This program is being offered by the Institute for Cardiovascular Diseases at Good Samaritan Hospital, 1033 East McDowell Rd., Phoenix, Ariz. 85002 on Jan. 10, 11, and 12, 1968. The meetings will be held at the Del Webb's House in Phoenix, Ariz. The program director is Alberto Benchimol, M.D., with guest faculty: William M. Chardack, M.D., E. Grey Dimond, M.D., Darrell D. Fanestil, M.D., Dean Franklin, George C. Griffith, M.D., Paul Huganholtz, M.D., Albert Kaffus, M.D., C. Walton Lillehei, M.D., Oscar Magidson, M.D., Alfred Pick, M.D., and Robert L. Van Citters, M.D. This is an official Postgraduate Course of the American College of Cardiology. For information about this program, write Mr. William B. Nelligan, Executive Director for the American College of Cardiology, 9650 Rockville Pike, Washington, D. C. 20015.

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Meetings OF MEDICAL SOCIETIES

AMA Annual—San Francisco, June 16-20, 1968.

AMA Clinical—Houston, November 26-29, 1967; Miami Beach, 1968.

Oregon Medical Association—Sept. 19-23, Portland.

Washington State Medical Association—Sept. 10-13, 1967, Seattle

Idaho Medical Association—June 26-29, 1968, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society — Annual Meeting, Sept. 24-27, 1967. Salishan,Gleneden Beach, Oregon
Pres., John W. Whitelaw, Vancouver, B.C.
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy.—April 4-6, 1968, Hilton Hotel, Portland, Oregon.
Pres., Henry Zeldewitz, Vancouver, B.C.
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association
Pres., Serge Bryner, Palo Alto, Calif.

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

West Coast Allergy Society—Nov. 30-Dec. 2, 1967, Phoenix, Arizona
Pres., John S. O'Toole, Riverside, Calif.
Sec., Roy R. Matteri, Portland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.)
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
Sec., E. W. Landreth, Portland

Oregon Radiological Society — University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Frederick R. Asbury, Corvallis
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society — Quarterly Meetings, Congress Hotel, Portland
Pres., Donald Beardsley, Portland
Sec., C. A. Macfarlane, Portland

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland
Sec., David Sellers, Portland

Portland Academy of Pediatrics — 1st Monday
Pres., C. W. Van Rooy, Portland
Sec., Glenn Lembert, Portland

Portland Academy of Psychiatry — Fourth Tuesday except Dec., June, July, Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May)
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland

UOMS Alumni Association—Annual Meeting, April 24-26, 1968, Portland
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract.—4th Mon., exc. June, July, Aug., Dec.
Pres., Donald McLaughlin, Seattle
Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto.—3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Robert Laughlin, Seattle
Sec., D. F. Milam, Jr., Bellevue

Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Bernard Gomberg, Seattle
Sec., Joe J. Griffin, Lynnwood

Seattle Pediatric Society—3rd Friday (Sept.-May), Arctic Club
Pres., James Tucker, Seattle
Sec., Janice Keller, Seattle

Seattle Surg. Soc.—4th Mon. (Sept.-June)
Pres., Carl Hutchinson, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society—Quarterly
Pres., Otto J. Penna., Spokane
Sec., Robert E. Jensen, Spokane

Tacoma Academy of Internal Medicine—4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club—3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle
Sec., John E. Nelson, Seattle

Washington Academy of General Practice—Meeting, May 2-3, 1968, Tyee Motor Inn, Olympia
Pres., William Mead, Seattle

Washington State Radiological Society—Quarterly, Seattle
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists Quarterly Seattle Annual Meeting
Pres., Richard J. Ward, Seattle
Sec., Philip Bridenbaugh, Seattle

Wash. St. Soc. of Allergy
Pres., Paul Van Arsdel, Jr., Seattle
Sec., S. H. Tarica, Seattle

Yakima Surgical Society—Last Thursday (Sept.-May)
Pres., Frank LeCocq, Yakima
Sec., John Harrington, Yakima

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Parke, Davis and Company	*Dilantin*	Inside Front Cover
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	Equanil	804, 805
	Pen Vee K	Inside Back Cover

Photo professionally posed

Mike expects a penicillin injection. He's about to be pleasantly surprised.

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Indications: Infections susceptible to oral penicillin G: prophylaxis and treatment of streptococcal infections; treatment of pneumococcal, gonococcal, and susceptible staphylococcal infections; prophylaxis of rheumatic fever in patients with a previous history of the disease.

Contraindications: Infections caused by nonsusceptible organisms; history of penicillin sensitivity.

Warnings: Acute anaphylaxis (may prove fatal unless promptly controlled) is rare but more frequent in patients with previous penicillin sensitivity, bronchial asthma or other allergies. Resuscitative (epinephrine, aminophylline, pressor amines) and supportive (antihistamines, methylprednisolone sodium succinate) drugs should be readily available. Other rare hypersensitivity reactions include nephropathy, hemolytic anemia, leucopenia and thrombocytopenia. In suspected hypersensitivity, evaluation of renal and hematopoietic systems is recommended.

Precautions: In suspected staphylococcal infections, perform proper laboratory studies including sensitivity tests. If overgrowth of nonsusceptible organisms occurs (constant observation is essential), discontinue penicillin and take appropriate measures. Whenever allergic reactions occur, withdraw penicillin unless condition being treated is considered life threatening and amenable only to penicillin. Penicillin may delay or prevent appearance of primary syphilitic lesions. Gonorrhea patients suspected of concurrent syphilis should be tested serologically for at least 3 months. When lesions of primary syphilis are suspected, dark-field examination should precede use of penicillin. Treat beta-hemolytic streptococcal infections with full therapeutic dosage for at least 10 days to prevent rheumatic fever or glomerulonephritis. In staphylococcal infections, perform surgery as indicated.

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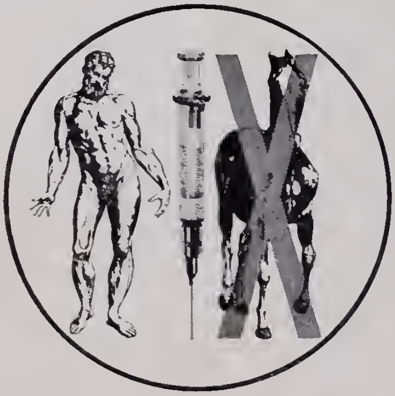

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Side Effects and Precautions: The likelihood of anaphylactic reactions or serum sickness is remote. Though not in connection with Hyper-Tet, very rare serious reactions from other human gamma globulin products have been reported. Their extreme rarity makes prediction of the occurrence impossible. Slight soreness at or over the injection site may be noted. Do NOT give intravenously. Skin tests should NOT be given since almost all individuals will give false positive reactions to any human gamma globulin product.

1. Furste, W.: International Surgical Digest, Oct., 1966; Summary of the Second International Conference on Tetanus, Bern, Switzerland, July, 1966.

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Northwest Medicine

VOLUME 66 • NUMBER 10

October 1967

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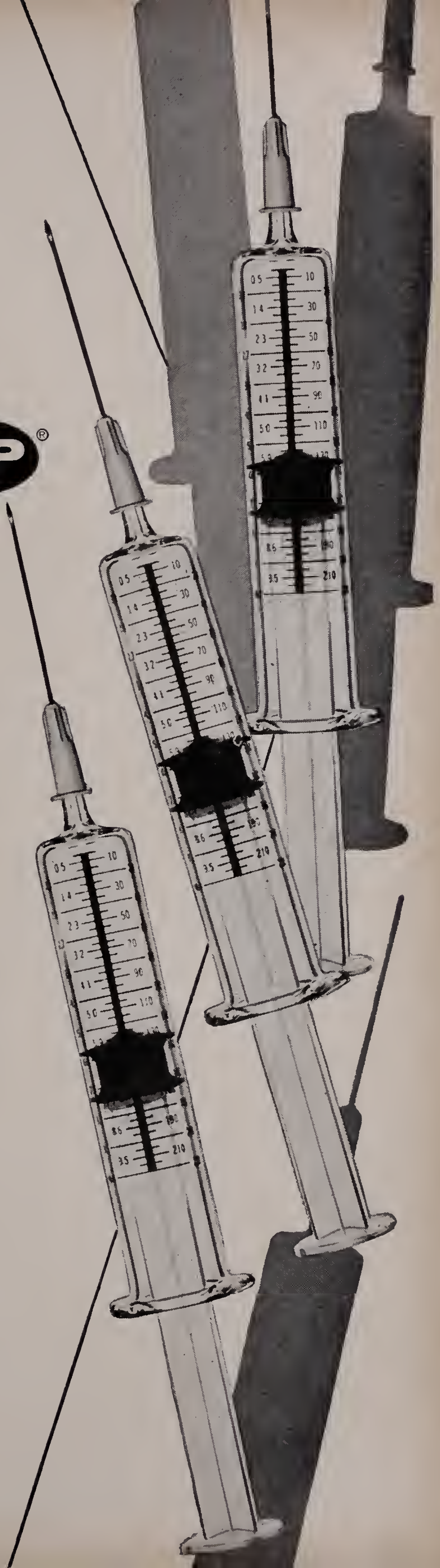

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New view of an oral contraceptive at work

Although suppression of ovulation remains the primary mode of action of oral contraceptives, newer knowledge indicates that products like Norinyl-1— a combination of both low-dosage progestogen and estrogen for the full treatment cycle—may provide multiple action that helps explain their unexcelled record of contraceptive effectiveness. This report explores the possible secondary protective mechanisms offered by combined hormonal administration.

Accumulating evidence has indicated that sparse, highly viscous cervical mucus has a possible adverse effect on the motility and survival of spermatozoa.

The estrogen-opposing progestational ingredient of Norinyl-1 (norethindrone 1 mg. with mestranol 0.05 mg.) changes the usual midcycle picture of a thin, watery cervical mucus. The result—a built-in barrier that appears to inhibit sperm from reaching the ovum should one be released. The inset in the adjoining photograph shows immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

See last page for contraindications, precautions, side effects and dosage.

How the estrogen-opposing action of Norinyl-1 creates cervical mucus that may be hostile to sperm penetration

Normally, estrogen activity during the fertile midcycle stimulates the production of a profuse and watery cervical mucus that permits maximum sperm motility and promotes penetration.

But what happens when Norinyl-1 is administered? Its potent progestogen, norethindrone, opposes estrogen stimulation of cervical mucus. Consequently, the amount of mucus decreases and its viscosity increases. This results in a sparse but thick mucus barrier that appears to diminish the vitality of the sperm and to impair its powers of penetration.

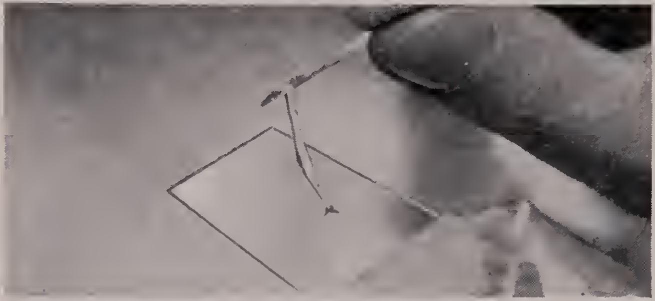
The role of viscous cervical mucus as a secondary action of Norinyl-1

In a report on 89 patients taking this medication,* cervical mucus obtained from cycle day 5 to cycle day 29 appeared scant and thick and exhibited little or no Spinnbarkeit.

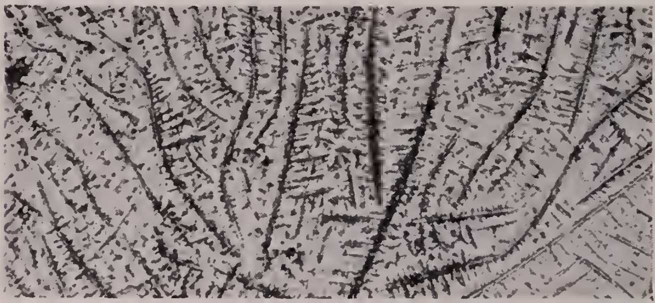
In the opinion of this investigator, the effect on cervical mucus may be sufficient to prevent conception.

*Cohen, M. R.: Symposium: Mechanisms of Action of Low Dosage Oral Contraceptive, Yale University Medical Center, New Haven, Conn., April 6, 1967.

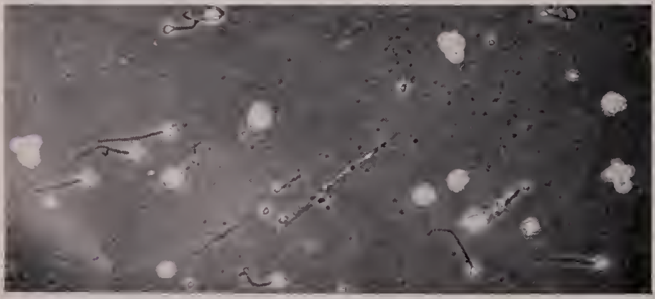
Normal cervical mucus at midcycle in untreated patient is known to permit sperm motility... promote sperm penetration.



Cervical mucus is thin and watery with a stretchability (Spinnbarkeit) of 15 to 20 cm.

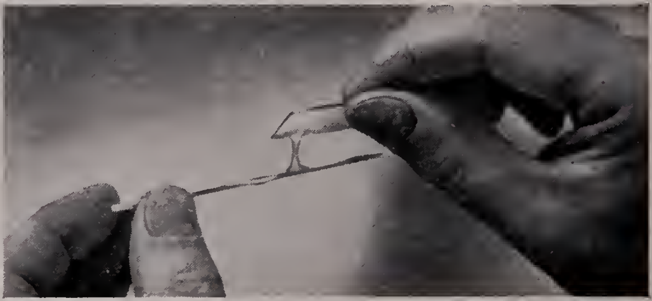


Thin, watery mucus crystallizes into this well-defined, fernlike pattern within a minute.

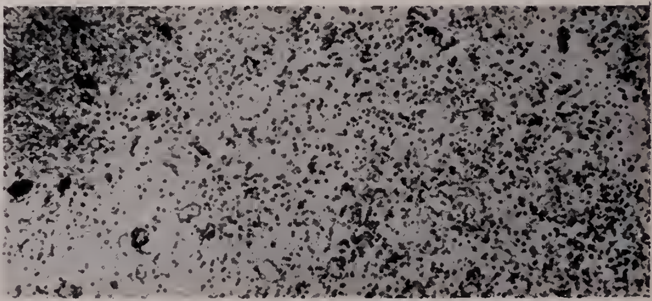


Spermatozoa appear healthy, are active and freemoving.

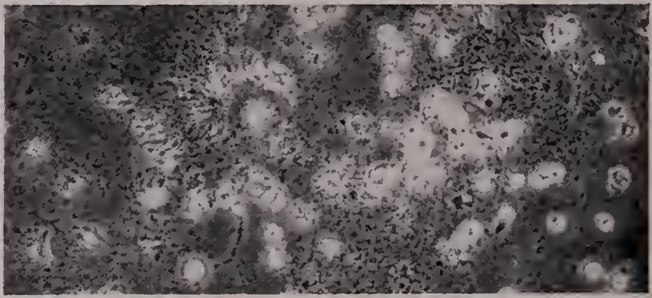
Viscous cervical mucus at midcycle produced by Norinyl-1 appears to impair sperm vitality... inhibit penetration.



Cervical mucus is scanty, thick and viscous. Spinnbarkeit is 1 cm. or less.



In thick, viscous cervical mucus the fern pattern is poorly defined or absent.

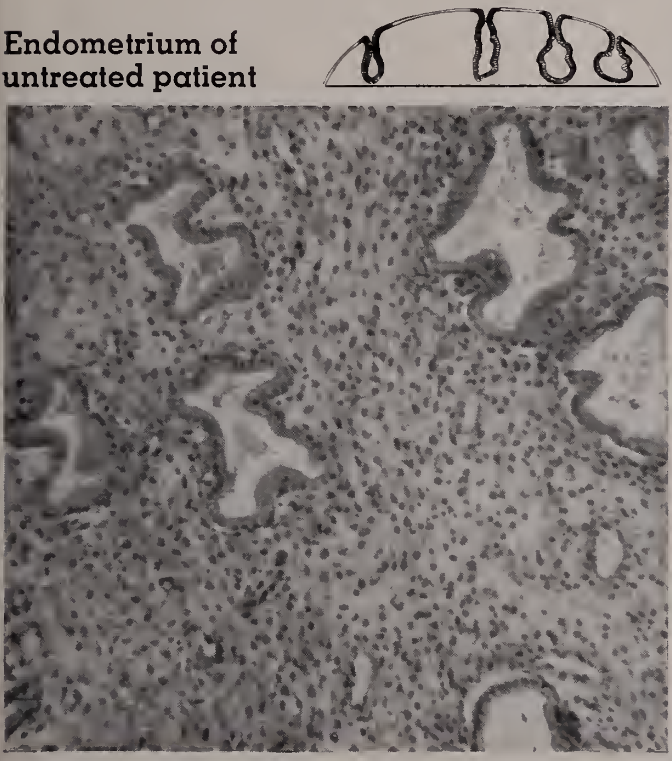


Immobile spermatozoa as they appear in cervical mucus taken from a patient treated with Norinyl-1.

How Norinyl-1 alters normal endometrial responses–another possible protective mechanism

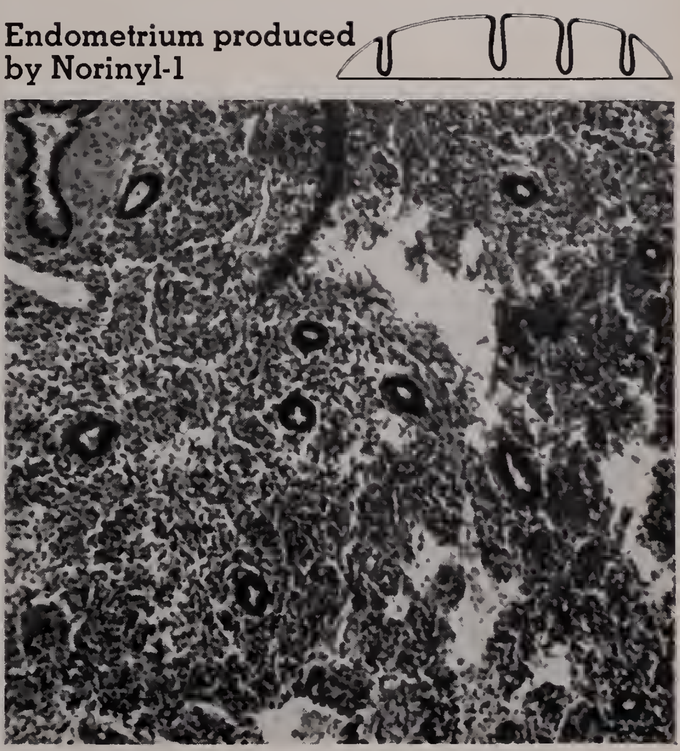
Let us suppose that an ovum is released—as occurs in an occasional, rare case—and somehow a sperm succeeds in penetrating the cervical mucus barrier. Should this come about, one additional action of Norinyl-1 may protect the patient from unwanted pregnancy. The theory is that progestogen intake makes endometrial tissue unreceptive to implantation.

Endometrium of untreated patient



Normally, the endometrium progresses through a proliferative phase stimulated by estrogen and a secretory phase stimulated by progesterone. During the secretory phase the endometrium is receptive to the fertilized ovum.

Endometrium produced by Norinyl-1



When Norinyl-1 is administered its progestogen component—norethindrone—accelerates the secretory phase and suppresses glandular and vascular development.

See last page for contraindications, precautions, side effects and dosage.

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Norinyl-1®
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Reduction of oral contraceptive dosage to lowest effective levels has become a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now available in a new strength in which *both* norethindrone and mestranol are reduced 50 percent. Studies show that Norinyl-1 achieves fertility control with only 1.05 mg. of combined progestogen and estrogen per tablet.

Norethindrone was first reported for use as a progestational agent in human beings in 1955. Norethindrone 2 mg. with mestranol 0.1 mg., as an oral contraceptive, is currently in use by over 2,000,000 women. Clinical experience now establishes that Norinyl-1 also amply meets the criteria of reliability and safety.*

*Symposium on Low-Dosage Oral Contraception, Palo Alto, Calif., July 15, 1965.

PRESCRIBING INFORMATION

Contraindications: 1. Patients with thrombophlebitis or with a history of thrombophlebitis or pulmonary embolism. 2. Liver dysfunction or disease. 3. Patients with known or suspected carcinoma of the breast or genital organs. 4. Undiagnosed vaginal bleeding.

Warnings: 1. Discontinue medication pending examination if there is sudden partial or complete loss of vision or if there is a sudden onset of proptosis, diplopia, or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. 2. Since the safety of Norinyl-l in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods, pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule, the possibility of pregnancy should be considered at the time of the first missed period. 3. Detectable amounts of the active ingredients in oral contraceptives have been identified in the milk of mothers receiving these drugs. The significance of this dose to the infant has not been determined.

Precautions: 1. The pretreatment physical examination should include special reference to breast and pelvic organs, as well as a Papanicolaou smear. 2. Endocrine and possibly liver function tests may be affected by treatment with Norinyl-l. Therefore, if such tests are abnormal in a patient taking Norinyl-l, it is recommended that they be repeated after the drug has been withdrawn for 2 months. 3. Under the influence of estrogen-progestogen preparations, preexisting uterine fibroids may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions that may be influenced by this factor, such as epilepsy, migraine, asthma, cardiac, or renal dysfunction, require careful observation. 5. Although a cause and effect relationship has not been established, Norinyl-l should be used with caution in patients with a history of cerebrovascular accident. 6. In relation to breakthrough bleeding, as in all cases of irregular bleeding *per vaginam*, nonfunctional causes should be borne in mind. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. 7. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 8. Any possible influence of prolonged Norinyl-l therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 9. A decrease in glucose tolerance has been observed in a small percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Norinyl-l therapy. 10. Because of the occasional occurrence of thrombophlebitis and pulmonary embolism in patients taking oral contraceptives, the physician should be alert to the earliest manifestations of the disease. A cause and effect relationship has not been demonstrated. 11. Because of the effects of estrogens on epiphyseal closure, Norinyl-l should be used judiciously in young patients in whom bone growth is not complete. 12. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-l may mask the onset of the climacteric. 13. The pathologist should be advised of Norinyl-l therapy when relevant specimens are submitted.

Side Effects: The following adverse reactions have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma, breast changes (tenderness, enlargement and secretion), loss of scalp hair, change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, erythema multiforme, erythema nodosum, hemorrhagic eruption, migraine, rash (allergic), itching, rise in blood pressure in susceptible individuals, mental depression.

The following occurrences have been observed in users of oral contraceptives. A cause and effect relationship has not been established: thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory results may be altered by the use of oral contraceptives: increased bromsulphalein retention and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metapyrone test, pregnanediol determination.

Other side effects reported to have occurred in association with use of this drug are dizziness, hirsutism, pains in legs, back, chest and abdomen, dysuria, drowsiness, vaginal discharge, libido increased and decreased, eruptions, hypermenorrhea, hypomenorrhea, increased appetite, G.U. infections, varicose veins, abdominal fullness, acne, headache, nervousness, allergies, blurred vision, pain in eyes, and itching in eyes. *For complete clinical data, see package insert.*

Dosage and Administration: 1. One tablet of Norinyl-l is administered orally for 20 days beginning on day 5 of the menstrual cycle. (Count day I of the cycle as the first day of menstrual bleeding.) Repeat this dosage schedule for each cycle. 2. If no menstrual period occurs after a cycle of treatment (20 tablets) in which patient adhered to the schedule, the patient must be instructed to resume taking the Norinyl-l tablets 7 days after the previous 20-day course was completed. For example, if the last pill of a previous cycle had been taken on a Sunday, then a new cycle of treatment should begin on the following Sunday. 3. In the postpartum woman, it is recommended that the first cycle of treatment should begin on day 5 of the first menstrual cycle. However, Norinyl-I should not be administered during lactation.

Availability: Norinyl-l (norethindrone 1 mg. with mestranol 0.05 mg.)—Dispensers of 20 and 60 and bottles of 250 tablets.

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NOTES

A literary CPC. In "The Adventure of the Dying Detective" Sherlock Holmes solved a murder by feigning an illness not named by Doyle. William B. Ober, of New York, solves the mystery of the diagnosis in an interesting analysis published in the August 1 issue of the New York State Journal of Medicine. Holmes fooled Dr. Watson, Mrs. Hudson, and the murderer by acting out an infectious disease of rapid onset, delirium, and downhill course of serious import. He announced that it was a coolie disease from Sumatra, infallibly deadly and horribly contagious. In arriving at the diagnosis, Dr. Ober points out that the disease used by Doyle must have been scrub typhus - tsutsugamushi disease. He says, "Doyle was too sound a doctor and had too much experience with tropical medicine not to have had some disease clearly in mind when he wrote (the story). Although the symptoms described are not entirely specific, they are clear enough, when coupled with the claim by Holmes that the disease came from Sumatra, to eliminate most of the other possibilities.

Federal health programs continue. While debate continues on H.R. 12080, amending the Social Security Act on Medicare, several programs are being extended. H.R. 12257, extending the Vocational Rehabilitation Act for two years, has been sent to the President for signature. It calls for $500 million in 1969 and $600 million in 1970. The House has passed H.R. 6430, Mental Retardation Amendments of 1967, extending construction support for three years. University affiliated facilities get $10 million in 1968 and $20 million, 1969-70. Community facilities get $30 million in 1969 and $50 million in 1970. The House has also passed H.R. 6418, Partnership for Health, that expands and extends the Comprehensive Health Planning and Public Health Service Amendments of 1966. This is the bill carrying $40 million for rat extermination.

We're indebted to Richard M. Magraw for this list of Maimonides' eight stages of charity: 1—Giving grudgingly. 2—Giving graciously but inadequately (i.e., failing to perceive need). 3—Giving on solicitation (i.e., after having been asked). 4—Giving before being asked but with gift open between donor and recipient. 5—Giving in which donor's largess is known to recipient but donor does not know to whom it goes. 6—Giving in which recipient is known to donor but giver is not known to recipient (or indeed fact of gift). 7—Giving without knowing to whom gift is going and in such a way that the recipient does not know who has given. 8—Conducting one's life or managing society in a way that takes away the occasion for charity.

Notes continued on page 895

DORSEY "FLU-GRAM"

DON'T BE LULLED BY RELATIVE LACK OF FLU LAST WINTER. THIS WINTER BE PREPARED: WHEN THE COMPLAINTS ARE COUGH AND CONGESTION, YOU CAN RELIEVE THESE SYMPTOMS WITH TUSSAGESIC TABLETS. ONE TIMED-RELEASE TABLET AT MORNING, MIDAFTERNOON AND BEDTIME BRINGS UP TO 24 HOURS' RELIEF FROM TROUBLESOME COUGH AND STUFFED AND RUNNY NOSE. TUSSAGESIC IS THE FAMOUS TRIAMINIC FORMULA, PLUS THREE OTHER PROVED CONSTITUENTS. MAKES PATIENTS MORE COMFORTABLE. FAST. ASK YOUR DORSEY REPRESENTATIVE FOR SUPPLY OF STARTER SAMPLES, OR IF FLU IS ALREADY EPIDEMIC, PHONE COLLECT. SEE BELOW.

each

Tussagesic®

timed-release tablet contains:

Triaminic® (phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	50 mg.
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

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a division of the Wander Company
Lincoln, Nebraska 68501

clip and file under "flu"

For relief of "flu-like" symptoms
Tussagesic timed-release tablets

PHONE COLLECT

For emergency starter samples
to Keith Sehnert, M.D.
Medical Director
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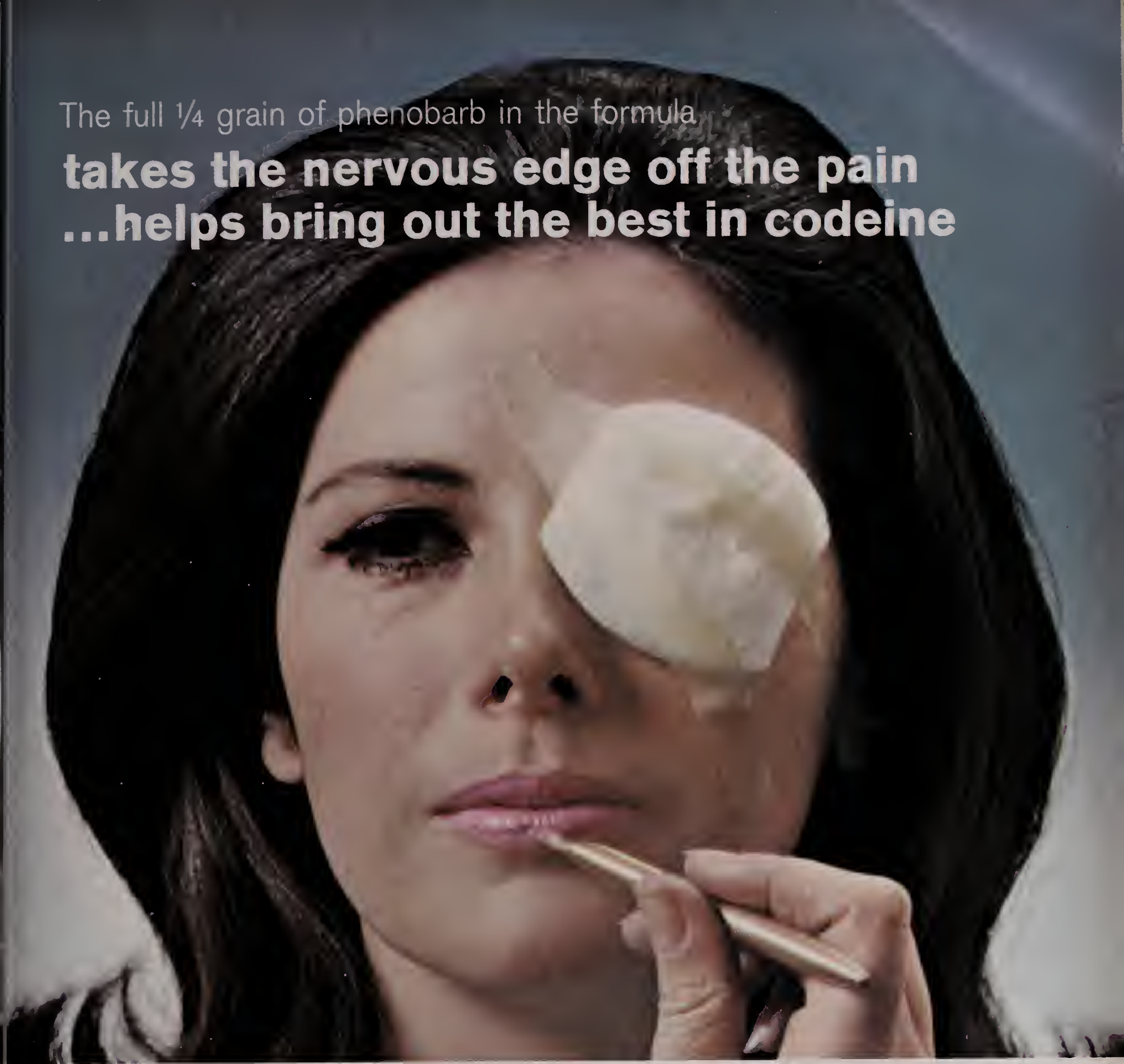
Fast delivery by your Dorsey
Representative


The full ¼ grain of phenobarb in the formula
takes the nervous edge off the pain
...helps bring out the best in codeine

Phenaphen® with Codeine the only leading compound analgesic that calms instead of caffeinates

Each capsule contains:

Phenobarbital (¼ gr.)	16.2 mg.
(Warning: may be habit forming)	
Aspirin (2½ gr.)	162.0 mg.
Phenacetin (3 gr.)	194.0 mg.
Hyoscyamine sulfate	0.031 mg.
Codeine phosphate	¼ gr. (No. 2), ½ gr. (No. 3), 1 gr. (No. 4)
(Warning: may be habit forming)	

Contraindications: Hypersensitivity to any ingredient.

Precautions: As with all phenacetin-containing products, avoid excessive or prolonged use.

Side Effects: Side effects are uncommon—nausea, constipation, and drowsiness have been reported.

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A. H. ROBINS CO., INC., Richmond, Va. 23220

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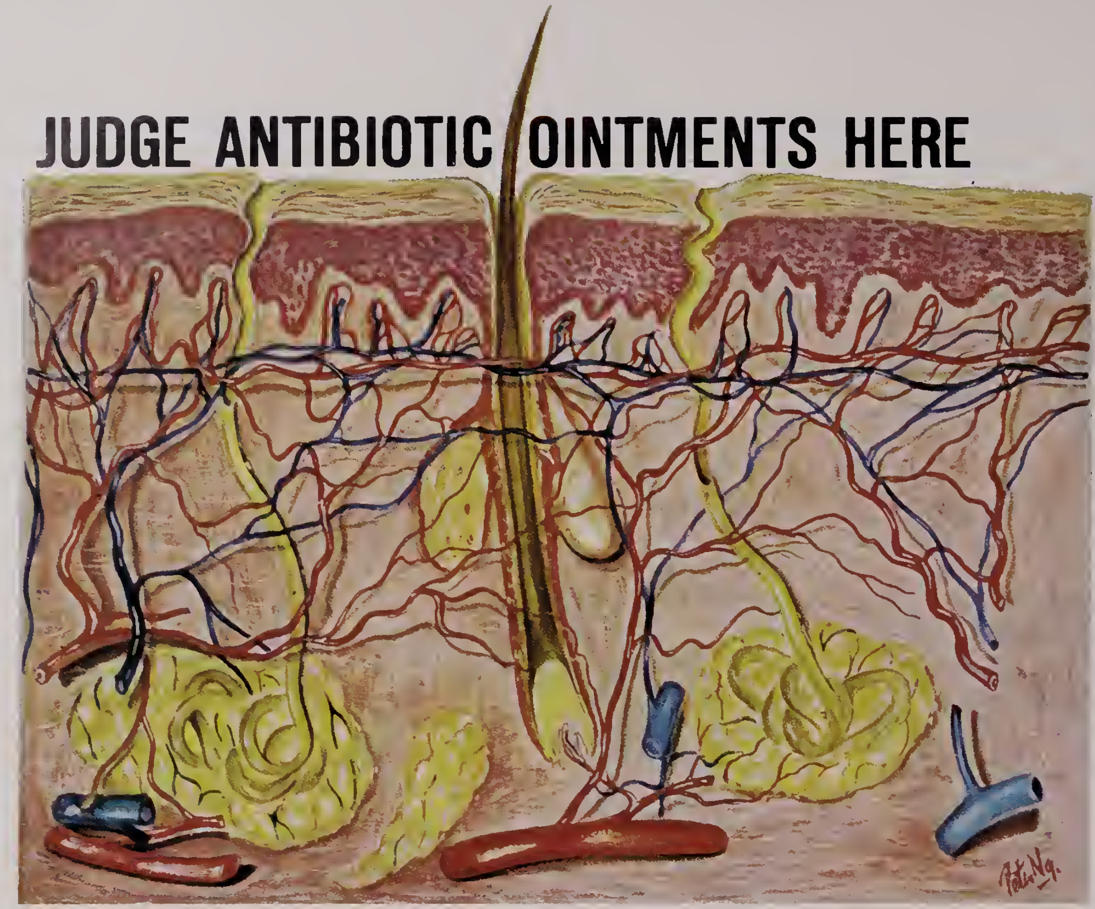

Results on skin are final proof of any topical antibiotic's effectiveness

No in vitro test can duplicate a clinical situation on living skin. 'Neosporin' (polymyxin B—bacitracin—neomycin) Ointment has consistently proven its effectiveness in thousands of cases of bacterial skin infection. The spectra of the three antibiotics overlap in such a way as to provide bactericidal action against most pathogenic bacteria likely to be found topically. Diffusion of the antibiotics from the special petrolatum base is rapid since they are insoluble in the petrolatum, but readily soluble in tissue fluids. The Ointment is bland and nonirritating.

Caution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Supplied: Tubes of 1 oz., ½ oz. with applicator tip, and ⅛ oz. with ophthalmic tip.

Complete literature available on request from Professional Services Dept. PML.

'NEOSPORIN'®
brand

POLYMYXIN B-BACITRACIN-NEOMYCIN
OINTMENT

BURROUGHS WELLCOME & CO. (U.S.A.) INC., Tuckahoe, N.Y.

continued from page 891

Potassium deficiency deaths from reducing pills? Several deaths in Oregon have been tentatively attributed to medication taken in effort to reduce weight. The pills are said to contain amphetamine, phenobarbital, thyroid, digitalis, a laxative and a diuretic. One patient who complained of severe muscular weakness was found to have very low serum potassium levels. Paralysis developed. She recovered quickly with replacement.

Dog and cat dealers. Public Law 89-544, known as the Laboratory Animal Welfare Act, provides for licensing of dealers who supply animals for research. A list of those licensed was published in the Bulletin of the National Society for Medical Research for August. Dealers were listed for 29 states and the District of Columbia. The report carried no listing for Oregon, Washington, or Idaho.

Computers and living creatures have another common characteristic. Some living things have been said to be in danger of drowning in their own secretions. It now seems that computers run some danger of being smothered in their own output. Something has to be done with the paper. A New York firm is offering a lifesaver for computers - a machine that will shred 1,500 lbs. of computer cards and crumpled paper per hour.

Washington State Heart Association has dropped the scare technique and is trying the light touch on propaganda against smoking. They talk about the pleasures of not smoking—better tasting food, unstained fingers, and whiter teeth. Non-smokers can run faster presumably to the bank with all the money they save by not smoking.

Frozen french fries fill farmers' funds. Processors in Idaho and Washington have stimulated spud production by using more than half the crop. Elliot Marple reports that 51.4 per cent of the 1966 Idaho crop and 61.5 per cent of the Washington crop went into frozen french fries, instant mashed potatoes and other such products. Tonnage thus utilized in Idaho last year exceeded total production in any year prior to 1955.

Notes continued on next page

Drug prices are going down. In spite of the fact that consumer prices on "all items" have increased 16 per cent from the base period of 1957-59, prescription drug prices have decreased. They have dropped 1.5 per cent during the first six months of this year and are now at 88.8 per cent of the level during the base period. Antibiotic prices have dropped 31.9 per cent since 1960.

Look for an eight-page insert about drugs in the November issue of Readers Digest. It has been prepared by the Pharmaceutical Manufacturers Association to explain the responsibilities of drug makers and the efforts of reputable manufacturers to meet them.

H.L.H.

"COCA-COLA" AND "COKE" ARE REGISTERED TRADE-MARKS WHICH IDENTIFY ONLY THE PRODUCT OF THE COCA-COLA COMPANY.

CORRESPONDENCE

This department is a forum, provided for free individual expression. Letters are published as received and given little or no editing. Proof is submitted when time permits, before publication. Responsibility for statements rests with the authors of these communications and not with this journal which strives only to protect the right of individuals to speak for themselves. Ed.

Field Man's Dream

Editor, NORTHWEST MEDICINE:

Great, simply great.

Your August, 1967, issue of NORTHWEST MEDICINE was an AMPAC field man's dream. Thank you most sincerely for your continued interest in our program. Physicians in your circulation area are certainly getting the word. I spotted at least five articles on the subject.

On page 737 in the Oregon summary I noted the Board of Trustees gave special recognition to OMPAC for its high membership rating. A. Curtis Jones and James Kircher drove home the necessity for political involvement on page 745 and 754.

The special box on page 755 featuring Blair Henningsgaard's photo and an announcement of Washington's September 10 Brunch couldn't have been placed in a more prominent position.

Finally, the summary and photo of AMPAC's 1967 Workshop that appeared in the Washington section was an excellent review of the proceedings.

RICHARD G. LAYTON
AMPAC Field Representative

Cigarette Ads Condemned

Editor, NORTHWEST MEDICINE:

The inclusion of an advertisement for cigarettes in your periodical is to be condemned. This implies approval of the use of cigarettes. This is especially important when it is considered that NORTHWEST MEDICINE has the approval of the Oregon Medical Association. Many of the suspected effects of cigarettes on health are now well proved and no longer controversial.

Sincerely,
JOHN A. BLANCHARD, M.D.
Portland, Ore. (97213)

Statement by Judicial Council

Editor, NORTHWEST MEDICINE:

Following is a Statement on Professional Courtesy adopted by the Judicial Council at a recent meeting. It is hoped that this Statement will serve as a guideline to members of the Association.

EDWIN J. HOLMAN
Secretary, Judicial Council
American Medical Association

The custom of professional courtesy embodies the ancient tradition of fraternalism among physicians in the art which they share, and their mutual concern to apply their learning for the benefit of one another as well as their patients. The Judicial Council reaffirms and endorses the principle of professional courtesy as a noble tradition that is adaptable to the changing scene of medical practice.

Professional courtesy is not a rule of conduct that is to be enforced under threat of penalty of any kind. It is the individual responsibilty of the physician to determine for himself and within his own conscience to whom and the extent to which he shall allow a discount from his usual and customary fees for the professional services he renders, and to whom he shall render such services without charge as professional courtesy.

The following guidelines are offered as suggestions to aid physicians in resolving questions related to professional courtesy.

1. Where professional courtesy is offered by a physician but the recipient of services insists upon payment, the physician need not be embarrassed to accept a fee for his services.

2. Professional courtesy is a tradition that applies solely to the relationship that exists among physicians. If a physician or his dependents have insurance providing benefits for medical or surgical care, a physician who renders such service may accept the insurance benefits without violating the traditional ethical practice of physicians caring for the medical needs of colleagues and their dependents without charge.

3. In the situation where a physician is called upon to render services to other physicians or their immediate families with such frequency as to involve a significant proportion of his professional time, or in cases of long-term extended treatment, fees may be charged on an adjusted basis so as not to impose an unreasonable burden upon the physician rendering services.

4. Professional courtesy should always be extended without qualification to the physician in financial hardship, and members of his immediate family who are dependent upon him.

correspondence continued on page 900

"When I couldn't even smell corned beef and cabbage, I decided it was time for you, Doc."

Maybe he doesn't know when he's well off. But you might want to prescribe long-acting Novahistine LP anyway.

Two tablets in the morning and two in the evening will usually provide day and night relief by helping to clear congested air passages for normal, free breathing. Novahistine LP is formulated to provide continuous therapeutic effect for 8 to 12 hours. The decongestant ingredients help restore normal mucus secretion and ciliary activity—physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

continued from page 897

Treating Tuberculosis

Editor, NORTHWEST MEDICINE*:*

I would draw your reader's attention to a short synopsis of the recently broadened indications for chemoprophylaxis of tuberculosis published in the September '67 issue of *American Review of Respiratory Disease* or available as reprints from all county tuberculosis associations or The Washington State Tuberculosis Association.

Ideally, tuberculosis would be eradicated best by treatment of all the estimated 25,000,000 tuberculin reactors (25 mm or more of induration to intermediate strength PPD) in the U.S., the reservoir from which all active cases must come. Also, ideally, this should be handled by the family physician or pediatrician using isoniazid 300 mg for adults or 10 mg per kilo for children in a single daily dose, an effective, safe and inexpensive medication.

Inasmuch as such a blanket program would be too Herculian a task, simple priorities have been established to provide prophylaxis to the higher risk groups within this reservoir, the general characteristics of which should be familiar to all doctors. Briefly stated and without attempt to substitute for the original article they are:

1. Cases of inactive tuberculosis after activity has been excluded.
    a. Ex-patients with no drug or inadequate drug treatment in the past.
    b. Persons with chest x-rays consistent with healed disease and positive skin test.
2. Special clinical situations, namely all patients with positive skin tests regardless of previous treatment who:
    a. Are on steroid therapy for any reason.
    b. Undergo gastrectomy.
    c. Have reticulo-endothelial disease.
    d. Have unstable severe diabetes.
    e. Develop measles or pertussis.
3. All household contacts of an active case with 5 mm or more induration to intermediate PPD.
4. Known converters of any age and most positive reactors under age 20.

Actove pursuance of such a program would result in many new patients for the physicians and would be a tremendous boon to the ultimate total eradication of tuberculosis.

R. C. GREENLEAF, M.D.
1012 Cobb Medical Center
Seattle, Wash. (98101)

correspondence continued on page 902

Diarrhea

TROCINATE® 400 MG.
BRAND THIPHENAMIL HCl.

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

WM. P. POYTHRESS & CO., INC.
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Manufacturers of ethical pharmaceuticals since 1856

Don’t let monilia cut broad-spectrum therapy short…

start with Tetrex-F®

tetracycline phosphate complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract… and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

Tetrex-F (tetracycline phosphate complex-nystatin) is especially useful in patients most susceptible to fungal overgrowth during tetracycline therapy: (1) the elderly or debilitated, (2) young children, (3) the diabetic, (4) those on long-term tetracycline therapy, (5) those on steroid therapy, (6) those who have had moniliasis before, and (7) pregnant patients with a history of monilial vaginitis.

When you start with economical Tetrex-F (tetracycline phosphate complex-nystatin), you can complete the full course of broad-spectrum therapy with less chance of losing control elsewhere. A good start for a healthy finish.

PRESCRIBING INFORMATION. For complete information consult Official Package Circular. *Indications:* Infections of respiratory, gastrointestinal and genitourinary tracts and skin and soft tissues due to tetracycline-sensitive organisms, in patients with increased susceptibility to monilial infections. *Contraindications:* The drug is contraindicated in patients hypersensitive to its components. *Warnings:* Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if skin discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). *Precautions:* Bacterial superinfections may occur. Infants may develop increased intracranial pressure with bulging fontanels. In gonorrheal therapy, serologic tests for syphilis should be conducted initially and monthly for 3 months. *Adverse Reactions:* Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis, and allergic reactions may occur. *Usual Adult Dosage:* 1 capsule q.i.d. Continue for 10 days in Beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals. *Supplied:* Capsules, bottles of 16 and 100. Each capsule contains tetracycline phosphate complex equivalent to 250 mg. tetracycline HCl activity and 250,000 units of nystatin. For Oral Suspension, 125 mg. tetracycline and 125,000 u. nystatin 5 ml., 60 ml. bottles.

BRISTOL

BRISTOL LABORATORIES
Division of Bristol-Myers Company
Syracuse, New York 13201

continued from page 900

Doctor-to-Doctor Program

Editor, NORTHWEST MEDICINE:

We are engaged in a program whereby the physicians of the U.S.A. are being asked to send their current medical journals, after they have read them, directly to colleagues overseas, particularly in Asia, Africa and Latin America.

The program has two functions: first, to provide *current* medical literature to overseas physicians who cannot obtain it otherwise, and second, to open up avenues of communication between all physicians and their overseas colleagues thereby establishing a basic medium for better understanding.

We can supply the names, addresses, and medical specialities of doctors in these areas who would be happy to receive these much wanted journals, (particularly specialty journals), which are to be mailed directly to overseas colleagues.

This doctor-to-doctor program is being sponsored by the American Medical Association with the collaboration of the World Medical Association. Cooperation in this program will be greatly appreciated and contacts with these colleagues in other countries, we can assure you, will prove very gratifying.

Those wishing to participate, should send name, address, and titles of journals they will contribute to: Doctor-to-Doctor Program, in care of The World Medical Association, Inc., 10 Columbus Circle, New York, New York 10019.

Sincerely yours,
ADA CHREE REID, M.D.
Director, Doctor-to-Doctor Program

This journal will endeavor to translate, into English, letters written in Spanish to those supplying journals and corresponding with colleagues in Latin America. Jack Welch Brown, Seattle, who practiced for several years in Brazil, has offered to do the same for those receiving letters written in Portuguese. Ed.

Shadel Hospital

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Seattle, Washington 98146
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The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

MEMBER OF THE AMERICAN HOSPITAL ASSOCIATION

A breakthrough in the control of pain

Talwin®
brand of
pentazocine
(as lactate)

a potent injectable non-narcotic—
may be used in place of morphine
and other narcotic analgesics

A breakthrough in the control of pain

Talwin®

brand of **pentazocine** (as lactate)

a potent injectable non-narcotic—may be used in place of morphine and other narcotic analgesics

Talwin 30 mg. relieves pain usually as quickly and effectively as morphine 10 mg.*

whatever the intensity of the pain

whatever the cause of the pain

whatever the site† of the pain

whatever the chronicity of the pain

whatever the age†† of the patient

without the liability of narcotics

without the development of tolerance on prolonged use

with less risk of severe respiratory depression than with morphine

with less constipation

with less urinary retention

Clinical experience of more than 150 investigators with over 12,000 patients given varying dosages of Talwin shows that this potent injectable analgesic is not a narcotic.

Talwin has less risk of severe respiratory depression, urinary retention, and constipation than morphine—a great boon for postsurgical patients.

Talwin produces less nausea, vomiting and diaphoresis than meperidine.

Constipation and urinary retention are seldom a problem with Talwin.

Very rarely do hallucinations or disorientation occur (0.1% each).

No significant hepatic, renal, hematopoietic or neurologic disturbances have been reported.

Talwin is well tolerated even by the aged or very ill patients.

Used during active labor, its tolerance by the mother and newborn is comparable to meperidine's. As with all new drugs, Talwin should be used with caution in pregnant women and in women delivering premature infants.

Tolerance to the analgesic effect of Talwin has not developed with prolonged use.

Talwin gives significant relief of pain in from 15 to 20 minutes following I.M. or S.C. injection.

Talwin relieves pain usually for 3 hours or longer with a single injection; however, the duration may sometimes be less than with morphine.

86 per cent of medical and surgical patients obtained excellent to good relief with Talwin 30 mg. administered

*Its duration of action may sometimes be less than that of morphine.

†Should not be used for patients with increased intracranial pressure, head injury or pathologic brain conditions.

††Until sufficient experience is gained, Talwin should

Talwin

brand of pentazocine (as lactate)

used for pain of all types

Talwin has a wide range of usefulness in surgery

Types of surgical use	Number of patients	Efficacy				
		% Exc.	% Good	Exc. + Good	% Fair	% Poor
• Preoperative	118	31	52	83%	15	2
• Postoperative	914	58	28	86%	8	6
• Pre- and postoperative	12	75	17	92%	0	8
• Minor surgery	33	30	39	69%	0	31
• Traumatic	14	64	29	93%	7	0
• Dental	33	67	24	91%	3	6

Total patients............1124

Efficacy of 30 mg. Talwin I.M. and S.C. as related to types of surgical use in a cooperative study

Data in files of Department of Medical Research, Winthrop Laboratories.

High incidence of poor results in minor surgery is due primarily to one study involving change of burn dressings in children; 9 of 19 patients obtained poor results with dose used.

Talwin relieves all types of pain in acute and chronic medical disorders

Type of medical pain	Number of patients	Percentage of relief				
		Excellent	Good	Exc. + Good	Fair	Poor
• Malignancy, pain in	161	44	37	81%	8	11
• Orthopedic; see also "Arthritis"	111	53	38	91%	5	4
• Cardiovascular pain; see also "Miscellaneous medical"	96	59	27	86%	6	7
• Genitourinary pain	83	42	33	75%	16	10
• Arthritis	76	33	51	84%	12	4
• Gynecologic pain	35	57	34	91%	6	3
• Cephalalgia	21	45	41	86%	9	5
• Gastrointestinal pain	19	89	5	94%	0	5
• Chest, including • Pleurisy • Pulmonary embolism and infarct • Lung abscess	12	83	17	100%	0	0
• Miscellaneous medical, including • Peripheral vascular disease • Thrombophlebitis • Cervical root pain • Facial neuralgia • Syringomyelia • Burns	108	50	39	89%	9	2

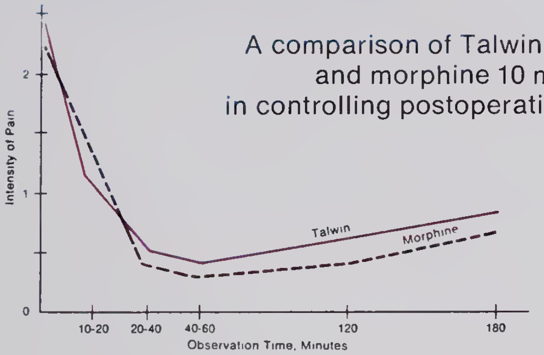
Total patients............722

Efficacy of 30 mg. Talwin I.M. and S.C. as related to types of medical pain in a cooperative study

Data in files of Department of Medical Research, Winthrop Laboratories.

See next page for additional product information

Talwin relieves pain as quickly as morphine



A comparison of Talwin 30 mg. and morphine 10 mg. I.M. in controlling postoperative pain[*]

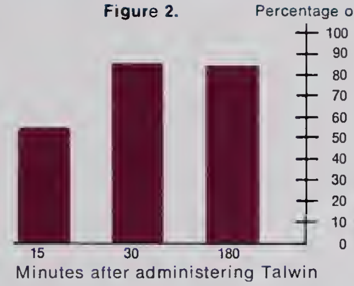
Figure 1.

Talwin 30 mg. proved equivalent to morphine 10 mg. in overall analgesic efficacy. During the early post-medication period (up to 40 minutes after drug injection), Talwin was superior in effect to morphine.

After observation periods ranging from 40 to 180 minutes there was no difference between the drugs in their effect on intensity. There were 141 and 119 complete patient records for Talwin and morphine, respectively, in this double-blind study. Other clinical investigators, studying duration, state that relief with Talwin may be obtained for up to three hours or longer, a period sometimes less than morphine's.

Talwin is as effective for severe pain (Fig. 2)[†] as for moderate pain (Fig. 3)[†]

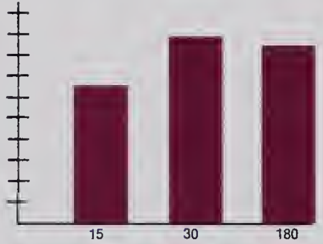
Figure 2.



Minutes after administering Talwin

Per cent excellent to good relief of severe pain obtained with 30 mg. Talwin in 218 postoperative patients

Figure 3.



Minutes after administering Talwin

Per cent excellent to good relief of moderate pain obtained with 30 mg. Talwin in 203 postoperative patients

Talwin does not require a narcotics prescription or narcotics records

The World Health Organization Expert Committee on Dependence-Producing Drugs concluded that "...there was no need at this time for narcotics control of pentazocine [Talwin] internationally or nationally."[‡]

---

[*] Storer, E. H.: Data in the files of the Sterling-Winthrop Research Institute.

[†] Cooperative study, data in the files of the Department of Medical Research, Winthrop Laboratories.

[‡] *World Health Organization Technical Report Series*, No. 343, 1966, p. 6

A breakthrough in the control of pain

Talwin®

brand of

pentazocine

(as lactate)

a potent injectable non-narcotic— may be used in place of morphine and other narcotic analgesics

Contraindications: *Increased Intracranial Pressure, Head Injury, or Pathologic Brain Conditions in which clouding of sensorium is undesirable.* Talwin (brand of pentazocine) should not be administered in these cases, since drug-induced sedation, dizziness, nausea, or respiratory depression could be misleading.

Precautions: *Pregnancy.* No teratogenic or embryotoxic effects attributable to the use of Talwin have been seen in extensive reproductive studies in animals; however, like all new drugs, Talwin should be given with caution to pregnant women. A large number of patients in labor have received the drug with no adverse reactions other than those that occur with commonly used strong analgesics. However, as with other strong analgesics, Talwin should be used with caution in women delivering premature infants.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Certain Respiratory Conditions. The possibility that Talwin (brand of pentazocine) may cause respiratory depression should be considered in treatment of patients with bronchial asthma. Talwin should be administered only with caution and in low dosage to patients with respiratory depression (e.g., from other medication, uremia, or severe infection), obstructive respiratory conditions, or cyanosis.

Patients Dependent on Narcotics. Because Talwin is a narcotic-antagonist, patients dependent on narcotics and receiving Talwin may occasionally experience certain withdrawal symptoms. Talwin should be given with special caution to such patients. It has been observed that some patients previously given narcotic-analgesics for one month or longer had mild withdrawal symptoms when the drug was replaced with the analgesic, Talwin. After a short period of adjustment the subjects were usually able and willing to continue taking Talwin, and relief of pain was satisfactory.

Nonaddicted Patients Receiving Narcotics. Symptoms believed to be indicative of antagonism to the opiate may be observed rarely with administration of Talwin to patients receiving opiates for a short time. Intolerance or untoward reactions are seldom observed after administration of Talwin to patients who have received single doses or who have had limited exposure to narcotics.

Impaired Renal or Hepatic Function. Although laboratory tests have not indicated that Talwin (brand of pentazocine) causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment. Extensive liver disease appears to predispose to greater side effects (e.g., marked apprehension, anxiety, dizziness, sleepiness) from the usual clinical dose, and may be the result of decreased metabolism of the drug by the liver.

Myocardial Infarction. As with all drugs, Talwin (brand of pentazocine) should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Adverse Effects: Talwin is relatively free from the undesirable side effects associated with morphine, such as constipation, urinary retention, or severe respiratory depression. Furthermore, Talwin produces less nausea, vomiting, and diaphoresis than meperidine.

In over 12,000 patients who received Talwin intramuscularly, subcutaneously, or intravenously, nausea, the most frequent adverse effect, occurred in approximately 5.0 per cent. In decreasing order of occurrence were vertigo, dizziness or lightheadedness; vomiting; and euphoria. Respiratory depression was reported as an adverse reaction in 1.0 per cent.

The incidence of each of the other adverse effects was well below 1.0 per cent: constipation, circulatory depression, diaphoresis, urinary retention, alteration in mood (nervousness, apprehension, depression, floating feeling), hypertension, sting on injection, headache, dry mouth, flushed skin including plethora, altered uterine contractions during labor, dermatitis including pruritus, dreams, paresthesia, and dyspnea occurred rarely after administration of Talwin (brand of pentazocine). Furthermore, each of the following adverse reactions occurred in less than 0.1 per cent: tachycardia, visual disturbance (blurred vision, diplopia and nystagmus), hallucinations, disorientation, weakness or faintness, muscle tremor, chills, allergic reactions including edema of the face, taste alteration, insomnia, diarrhea, cramps, and miosis; laryngospasm in one patient.

Talwin has not produced severe respiratory embarrassment in adults (never apnea), even with large amounts. A small number of newborn infants whose mothers received Talwin during labor had transient apnea. The incidence of temporary diminution in the rate or strength of uterine contractions is low after administration of Talwin, similar to that following meperidine hydrochloride. (In reporting no interference with normal labor in patients receiving Talwin, one investigator further stated that the drug may increase uterine activity.) Generally, no significant fetal heart rate change occurs.

Laboratory tests of blood and of liver and kidney functions have revealed no significant abnormalities. A minimum and probably insignificant increase in the per cent of eosinophils in peripheral blood counts and bone marrow occurred occasionally.

Talwin is well tolerated by patients with diabetes mellitus, and no changes in insulin requirements have been observed.

Dosage and Administration: *Adults, Excluding Patients in Labor.* Average recommended single parenteral dose is 30 mg., by intramuscular, subcutaneous, or intravenous route; may be repeated every three to four hours. Pain has been relieved in most patients with not more than three doses daily. Infrequently, selected patients have received single doses as high as 60 mg.

Patients in Labor. A single, intramuscular 30 mg. dose has been most commonly administered. An intravenous 20 mg. dose has given adequate pain relief to some patients in labor when contractions become regular, and this dose may be given two or three times at two- to three-hour intervals, as needed.

Children Under 12 Years of Age. Since clinical experience in children under twelve years of age is limited, the use of Talwin (brand of pentazocine) in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who received Talwin for prolonged periods (e.g., over 300 days) experienced no withdrawal symptoms even when administration was stopped abruptly; furthermore, there was no tolerance to the analgesic effect.

CAUTION. Talwin should not be mixed in the same syringe with soluble barbiturates because precipitation will occur.

Treatment of Overdosage or Respiratory Depression. Talwin has not produced apnea or severe respiratory embarrassment in adults, even in large doses. Occasionally, however, moderate respiratory depression may occur. Means of maintaining proper oxygenation should be available in case of overdosage or respiratory depression, and methylphenidate (Ritalin®) should be administered parenterally. The usual narcotic-antagonists, such as nalorphine, are not effective respiratory stimulants for depression due to Talwin.

How Supplied: Ampuls of 1 ml., containing Talwin® (pentazocine) as lactate equivalent to 30 mg. base and 2.8 mg. sodium chloride, in Water for Injection. **Boxes of 10, 25, and 100.**

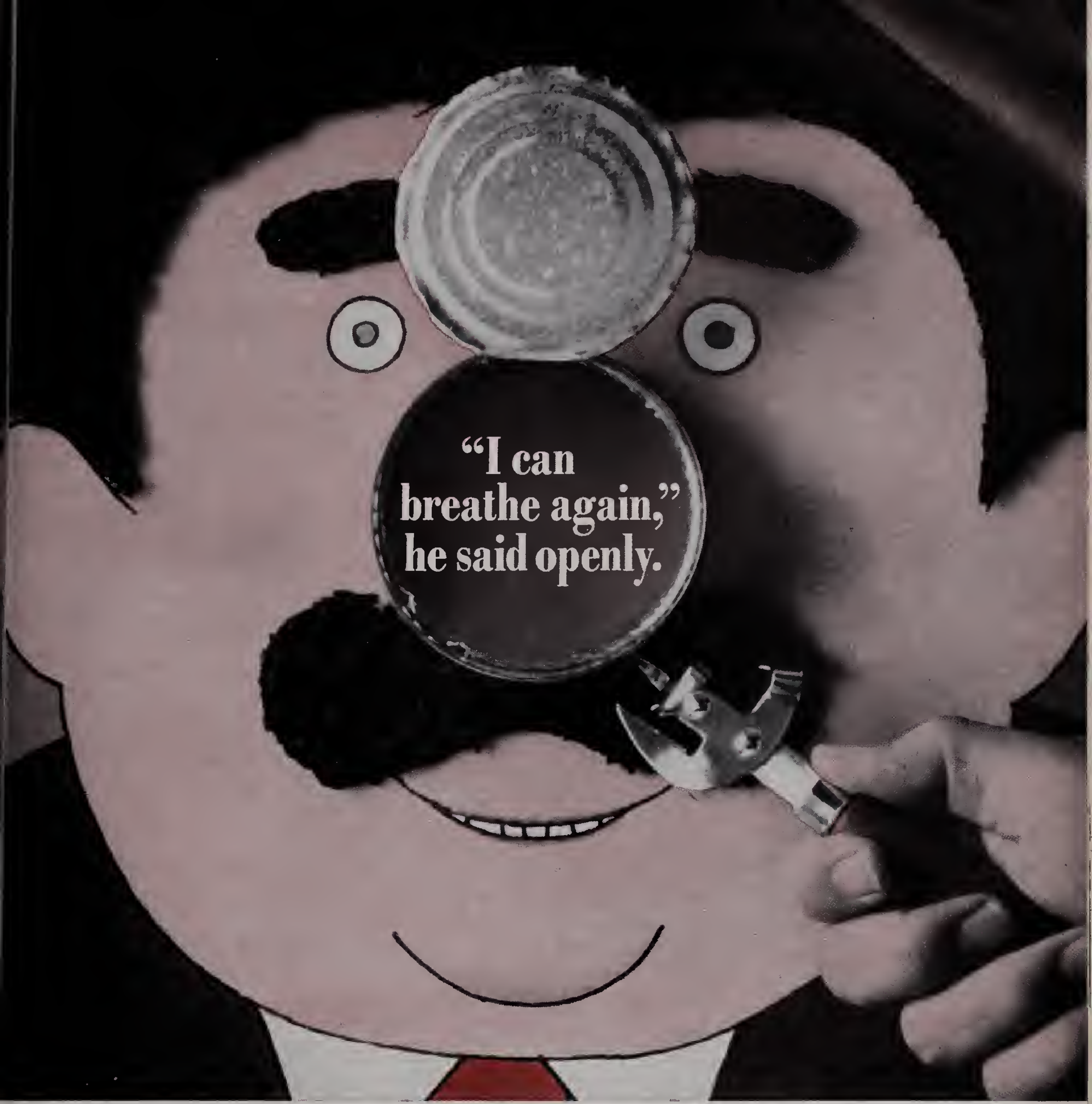
Multiple dose vials of 10 ml., each 1 ml. containing Talwin® (pentazocine) as lactate equivalent to 30 mg. base, 2 mg. acetone sodium bisulfite, 1.5 mg. sodium chloride, and 1 mg. methylparaben as preservative, in Water for Injection. **Boxes of 1.**

The pH of Talwin solutions is adjusted between 4 and 5 with lactic acid and sodium hydroxide.

Winthrop

Winthrop Laboratories, New York, N.Y. 10016

PRINTED IN U.S.A. ISSUED AUGUST, 1967 (1035M)


"I can breathe again," he said openly.

in sinusitis, colds, U. R. I.

Dimetapp® Extentabs®

(Dimetane® [brompheniramine maleate], 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.)

up to 10-12 hours clear breathing on one tablet

It's clear—Dimetapp lets your "stuffed-up" patients breathe easy again. Each hard-working Extentab brings welcome relief from the stuffiness, drip and congestion of upper respiratory conditions for up to 10-12 hours. Yet, patients seldom experience drowsiness or overstimulation. Its key to success is the Dimetapp formula: Dimetane (brompheniramine maleate)—along with phenylephrine and phenylpropanolamine, two time-tested decongestants. They get the job done...in a hurry.

Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy. **Precautions:** Until patient's response has been determined, he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. **Side Effects:** Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered. A. H. ROBINS COMPANY, Richmond, Virginia 23220
Dosage: 1 Extentab morning and evening. **Supplied:** Bottles of 100 and 500.

A·H·ROBINS

DUAL PROBLEM IN PEPTIC ULCER

Relief of hyperacidity is still a primary goal in the treatment of peptic ulcer. And antacids are the most widely used means of achieving this relief. But antacids alone cannot influence the distention and bloating which so often add to ulcer distress.

THIS IS WHY MYLANTA® PROVIDES:

the two most widely used antacids—magnesium and aluminum hydroxides—to help secure rapid acid neutralization with little chance of laxation or constipation;

PLUS

the defoaming action of simethicone—to help relieve the painful gas symptoms which often accompany peptic ulcer.

Mylanta®

antacid therapy plus an added benefit

nonfatiguing flavor/smooth pleasant texture; both assure patient cooperation during long-term therapy.

Stuart Division of / ATLAS CHEMICAL INDUSTRIES, INC. / Pasadena, Calif.

When things are really not as bad as they seem, give Adipex.

Each Adipex Ty-Med* tablet or capsule contains: Methamphetamine hydrochloride 10 mg./ Amobarbital (Warning, may be habit forming) 50 mg./Homatropine methylbromide 7.5 mg.
*Lemmon brand of timed-release medication.

In the depressed state caused by temporary stress, every fear, every problem and every ache assumes exaggerated importance to your patient. This nervous depression, which is frequently situational in origin and self-limiting in nature, is usually amenable to therapy with Adipex.

Adipex is ideal for short term treatment of your mildly depressed patients. Its soothing, mood-elevating ingredients ease the symptoms of nervous depression, while the antispasmodic helps to control tension-induced GI distress. With your professional counselling and supportive therapy with Adipex, a normal outlook can be restored to these patients as they learn to cope with or overcome the depression caused by temporary stress.

Dosage: The usual dose of Adipex Ty-Med is one tablet or capsule daily, taken on arising.

Side Effects: Insomnia, excitability, central excitatory symptoms or cardiovascular reactions.

Precautions: Discontinue use if rapid pulse, dizziness or blurring of vision occurs.

Contraindications: Coronary or cardiovascular disease, hypertension, hyperthyroidism, hyperexcitable or psychotic states, glaucoma, or idiosyncrasy or habituation to any of the components.

Caution: Federal law prohibits dispensing without prescription.

Supplied: Bottles of 100 and 1000 tablets or capsules.

Reference: Feigley, D. M.: Office care of mild emotional distress, Dis Nerv Syst *23*:450 (Aug) 1962.

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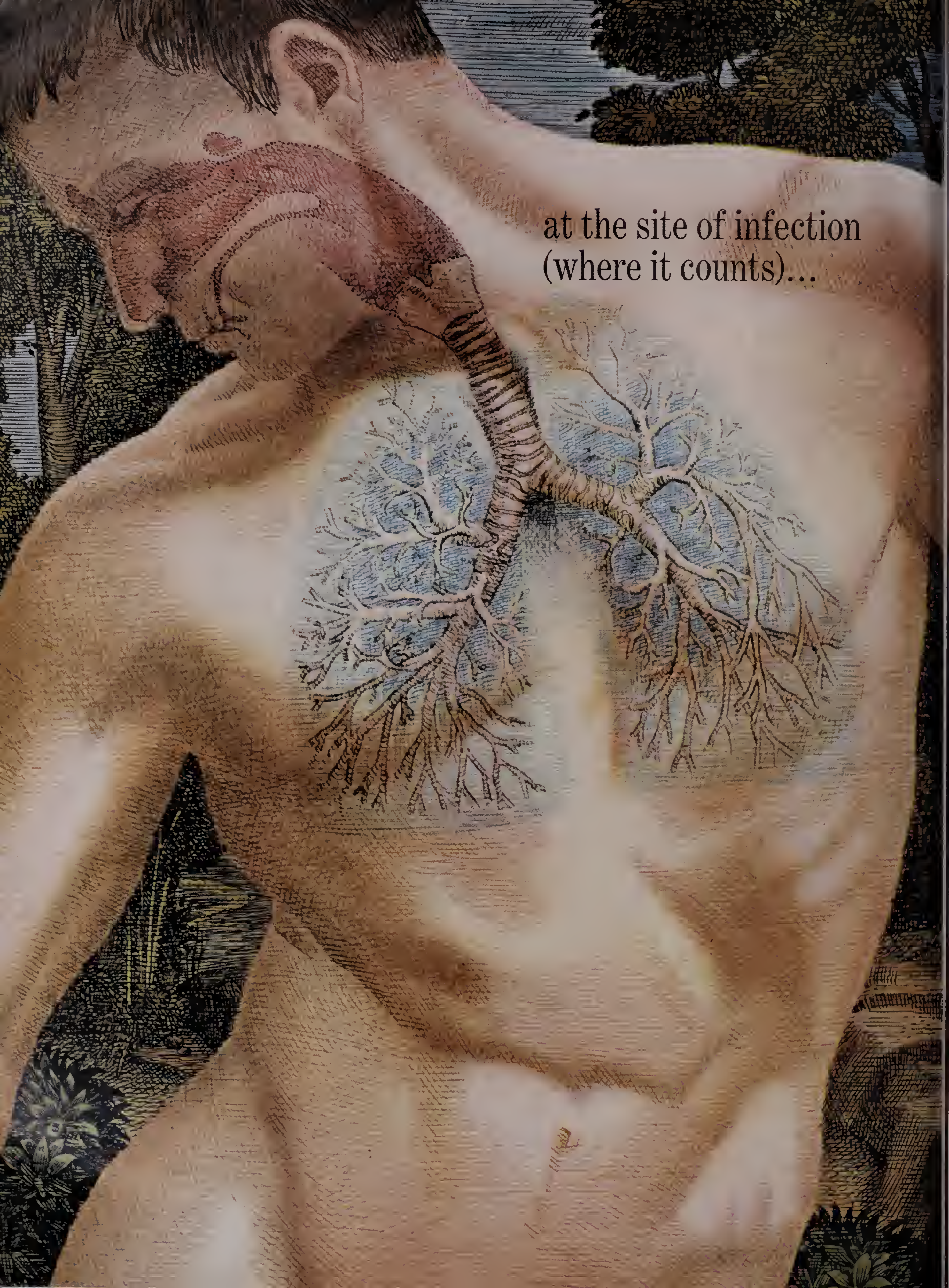
HAACK LABORATORIES, INC.,
Division of Lemmon Pharmacal Company, Portland, Oregon 97208


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Now available:
New! Ready-mixed Ilosone Liquid 125! (Contains erythromycin estolate equivalent to 125 mg. erythromycin base per 5-cc. teaspoonful.)

701464

Ilosone®
Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by micro-organisms sensitive to its action—especially staphylococci, hemolytic streptococci, and pneumococci.

It has been effective in streptococcus infections, particularly acute bacterial pharyngitis and tonsillitis; staphylococcus disease, including soft-tissue infections, furunculosis, abscesses, cellulitis, carbuncles, and wound infections; pneumococcus pneumonia and acute bronchitis with pneumococci on culture, bronchopneumonia, and otitis media.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents; surgical procedures should be performed when indicated, and large doses of the antimicrobial agents should be employed.

Penicillin is the drug of choice for syphilis and gonorrhea, but Ilosone in multiple 500-mg. doses has been useful in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Known history of sensitivity to this drug; preexisting liver disease or dysfunction.

Adverse Reactions: Hepatic dysfunction with or without clinical jaundice has been reported infrequently. Changes in liver function tests indicative of intrahepatic cholestasis appear to be the result of individual idiosyncrasy. Findings subsided when treatment was discontinued. Occasionally, symptoms simulated extrahepatic obstructive jaundice or the colic of biliary tract disease.

When jaundice appeared to be related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Gastro-intestinal disturbances not associated with hepatic effects and occasional allergic manifestations (urticaria, skin eruptions, and, rarely, anaphylaxis) have been reported. The normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Administration and Dosage: Ilosone is administered orally.

Infants and children under twenty-five pounds, 5 mg. per pound every six hours; twenty-five to fifty pounds, 125 mg. every six hours. Adults and children over fifty pounds, 250 mg. every six hours.

For severe infections, double the dosage. When larger doses are indicated, consider parenteral erythromycin therapy. In beta-hemolytic streptococcus infections, maintain treatment for ten days to prevent rheumatic fever or glomerulonephritis.

In syphilis, a total of 20 to 30 Gm. is administered in divided doses for ten to fifteen days. Close follow-up is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examination of spinal fluid is recommended during follow-up.

In gonorrhea, the dosage is 500 mg. four times a day for four days. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics and monthly serologic tests for three months. For detailed information, consult the package literature.

How Supplied: Pulvules® Ilosone, Capsules, N.F., 125 mg.* and 250 mg.*

Ilosone Liquid 125, Oral Suspension, U.S.P., 125 mg.* per 5-cc. teaspoonful.

Ilosone, 125, for Oral Suspension, N.F., 125 mg.* per 5-cc. teaspoonful.

Ilosone Drops, 5 mg.* per drop.

Tablets Ilosone Chewable, N.F., 125 mg.*

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*Base equivalent. [080967]

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

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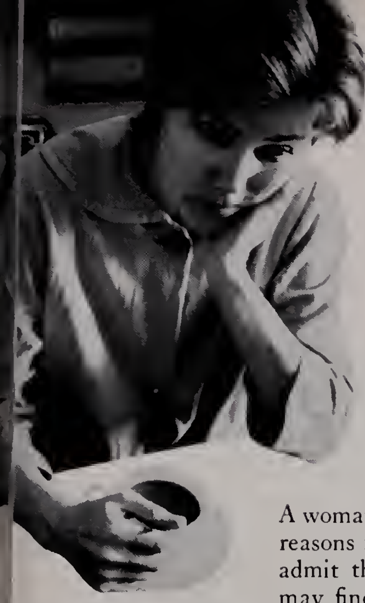


Tears without grief

Crying Spells–psychic tension with depressive symptoms?

"I don't know what's the matter with me lately...I cry and I cry... and I really don't know why I do."

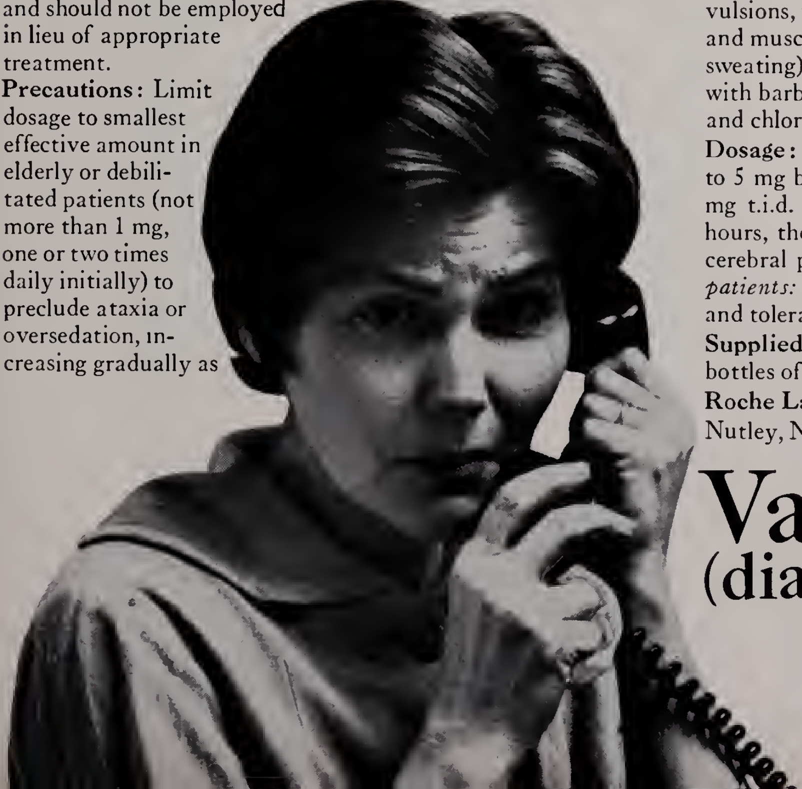
A woman often is not conscious of the real reasons for her crying spells or refuses to admit them to herself. On probing, you may find that frequent weeping, like insomnia or neurotic fatigue, often is an expression of psychic tension. She needs sympathy and reassurance, and perhaps a calming agent to help her over her crisis. Consider prescribing Valium (diazepam) for her. It usually reestablishes calmness promptly. Crying spells and other secondary depressive symptoms normally subside as the tension is relieved. Your patient then can cope more easily with stresses to which she is subjected. Valium (diazepam) is generally well tolerated, and on proper mainteenance dosage usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

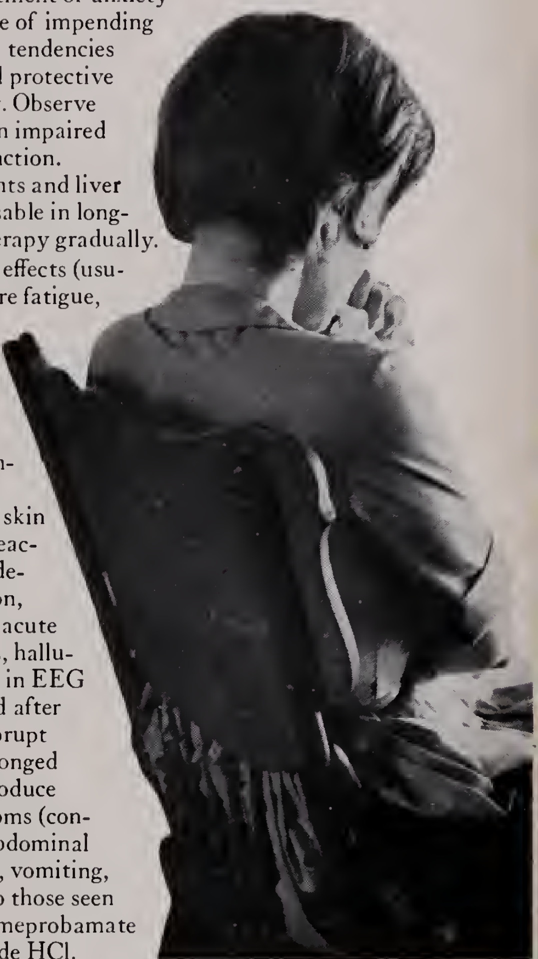
Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug.

Warning: Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.





Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.

Dosage: *Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions.)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.

Roche Laboratories, Division of Hoffmann-La Roche Inc.
Nutley, N. J. 07110

ROCHE

Valium®
(diazepam) Roche®

useful for the relief of psychic tension with associated depressive symptoms

LOMOTIL® tablets/liquid controls diarrhea

Each tablet and each 5 cc. of liquid contains:
diphenoxylate hydrochloride . . . . 2.5 mg.
(Warning: May be habit forming)
atropine sulfate . . . . 0.025 mg.

In six published studies[1-6] detailed results are given on the use of Lomotil in 111 patients with chronic ulcerative colitis. They show that Lomotil gave satisfactory to "excellent" control of diarrhea in more than two-thirds of these patients. As the disorder advances and destroys bowel musculature, the motility-lowering action of Lomotil, understandably, has less effect.

The successful use of Lomotil in a disorder as exceedingly difficult to treat as moderate ulcerative colitis emphasizes again its unsurpassed antidiarrheal effectiveness in these more common conditions:

- **Gastroenteritis**
- **Acute infections**
- **Spastic colon**
- **Drug induced diarrhea**
- **Functional hypermotility**

For correct therapeutic effect
Rx correct therapeutic dosage

Dosage: The recommended initial daily dosages, given in divided doses until diarrnea is controlled, are:

Children: Total Daily Dosage

3-6 mo. . . ½ tsp.*t.i.d. (3 mg.)
6-12 mo. . ½ tsp. q.i.d. (4 mg.)
1-2 yr. . . . ½ tsp. 5 times daily (5 mg.)
2-5 yr. . . . 1 tsp. t.i.d. (6 mg.)
5-8 yr. . . . 1 tsp. q.i.d. (8 mg.)
8-12 yr. . . 1 tsp. 5 times daily (10 mg.)
Adults: 2 tsp. 5 times daily (20 mg.)
or 2 tablets q.i.d.

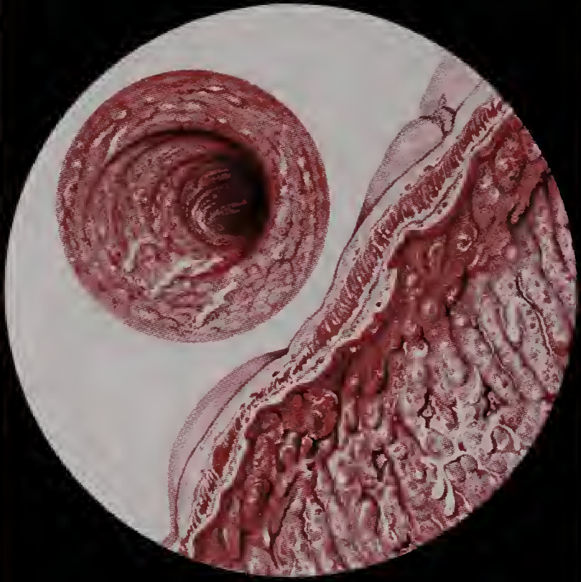
*Based on 4 cc. per teaspoonful.
Maintenance dosage may be as low as one-fourth the initial daily dosage.

Precautions: Lomotil is a federally exempt narcotic preparation of very low addictive potential. Recommended dosages should not be exceeded, and medication should be kept out of reach of children. Should accidental overdosage occur signs may include severe respiratory depression, flushing, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and tachycardia. Lomotil should be used with caution in patients with impaired liver function or those taking addicting drugs or barbiturates.

Side Effects: Side effects are relatively uncommon but among those reported are gastrointestinal irritation, sedation, dizziness, cutaneous manifestations, restlessness, insomnia, numbness of the extremities, headache, blurring of vision, swelling of the gums, euphoria, depression and general malaise.

even in ulcerative colitis...

characterized by:
— diarrhea, cramps, tenesmus
— bloody, mucoid, purulent stools



1. Barowsky, H., and Schwartz, S. A.: J.A.M.A. *180*:1058-1061 (June 23) 1962. 2. Cayer, D., and Sohmer, M. F.: N. Carolina Med. J. *22*:600-604 (Dec.) 1961. 3. Hock, C. W.: J. Med. Ass. Georgia *50*:485-488 (Oct.) 1961. 4. Van Derstappen, G., and Vandenbroucke, G.: Med. Klin. *56*:962-964 (June 2) 1961. 5. Merlo, M., and Brown, C. H.: Amer. J. Gastroent. *34*:625-630 (Dec.) 1960. 6. Weingarten, B.; Weiss, J., and Simon, M.: Amer. J. Gastroent. *35*:628-633 (June) 1961.

SEARLE *Research in the Service of Medicine*

Misunderstanding About the Nature of Medical Care

The victims of Procrustes may have suffered no more than the victims of a system that distorts the human realities of medical practice into something that fits a third party report form. And attempts to deliver medical care by the bucketful have produced fragmentation, unnecessary expense, and unsatisfactory organization. Unfortunately, important segments of the insurance business and the medical profession have not fully understood the problems involved, or the reasons for failure to meet human needs when there is fundamental misunderstanding about the nature of medical care. Unwise action, based on such misunderstanding, has caused widespread concern among physicians.

Richard M. Magraw, author of the provocative book, "Ferment in Medicine," called attention to some of these overlooked factors when he participated in the National Conference on Medical Costs, last June. He realized, at the time, that he was not giving the kind of report anticipated by those who had invited him to speak.

Magraw sees the third party system as something designed for a condition that seems to exist but really does not. The real needs are not those ordinarily assumed. The third party system is a development based on the experience in casualty insurance, where an incident is specific, can be described accurately, and involves a predictable amount of time. This concept of the need for medical care was satisfactory as a basis for establishing rates of payment for care of the injured or for many surgical procedures and was used with little difficulty when demand for prepayment schemes was demand for protection against what most people would call a catastrophic episode. This is a method of merchandising medical care by the bucketful—a certain price for a certain quantity.

Thinking about medical care was thus distorted, and the episodic consideration spilled over into the thinking applied when the prepayment principle was extended in attempt to cover other patient needs. The concept resembles that of Sydenham—that illness is something superimposed, extraneous, and removable. From this viewpoint it follows that illness can be removed if the proper treatment is applied, a type of thinking that leads readily to the fallacy that by spending enough dollars it is possible to buy perfection.

Those who have read Magraw's "Ferment" will realize immediately that he understands too much about human needs to embrace any such philosophy. He quotes the aphorism displayed in the Hotel Dieu, in Paris—"to cure seldom, to help sometimes, to understand always." He told the Conference that "the caretaking and alleviating function in medicine still far outweighs the function of providing cures or specific therapy."

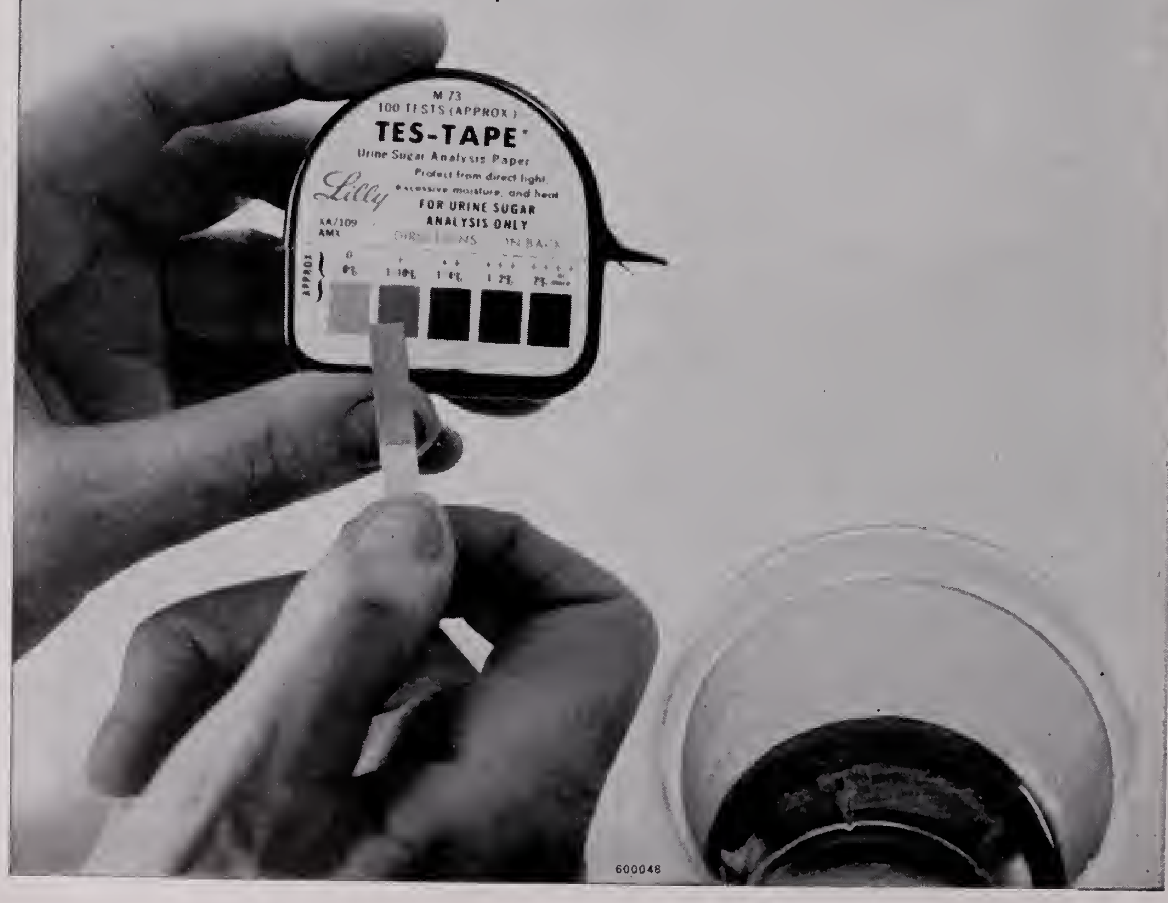
The Conference on Medical Costs was called to consider what some have called a health care investment. Magraw believes it necessary to examine the question of what is being purchased. Many assume that health is being bought. But that is not what people are paying for and it is not what they are getting. Magraw says, "We must keep these considerations in mind or we will find that we are verging on a confusing kind of double talk when we speak of the 'purchase of health care.' We may even lose sight of the fact that care or comfort in time of illness is a deep human need and forget the idea of the association of care with specific help or cure is an assumption deriving more from wish than logic or experience. It is, for many reasons, undesirable and indeed impossible to separate the 'cure' the 'help' and the 'comfort' elements of medical care."

Medical care should not be merchandised by the bucketful, it should not be fragmented, it should not be made unnecessarily expensive, and it should not be provided by unsatisfactory organization. The Procrustean principle of fitting a report of illness into a third party report form—a force making dishonesty almost obligatory—should not be required. Fundamental misunderstandings about the nature of medical care will have to be corrected before the present widespread concern of physicians can be quelled. ■

H.L.H.

easy does it!

tear, moisten, compare—that's all!


M 73
100 TESTS (APPROX.)
TES-TAPE®
Urine Sugar Analysis Paper
Lilly
Protect from direct light, excessive moisture, and heat
FOR URINE SUGAR ANALYSIS ONLY
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AMX
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Altitude Effects on the Human Body

Ultraviolet Cold and Low Pressure

GENE W. MASON, M.D., Everett, Washington

Increases in altitude present four fairly distinct stresses which impinge heavily on the human organism. These are: 1. Decreasing temperature, 2. Increasing ultraviolet radiation. 3. Decreasing barometric pressure. 4. Decreasing partial pressure of oxygen.

Heat is normally lost from the body via conduction, convection, radiation, and evaporation. Several of these are greatly accentuated at altitude, especially during mountaineering. The body responds to these losses with an initial compensatory response, and finally with a late decompensated response.

The major problems at altitude result from a low partial pressure of oxygen in the inspired air, leading to a low hemoglobin saturation. The appearance and severity of the signs and symptoms of hypoxia depend upon the altitude, rate of ascent, duration at altitude, physical activity and individual tolerance. The symptoms can be divided primarily into cerebral and cardio-respiratory categories.

As the medical member of mountaineering expeditions that reached the summits of the North and South American Continents, I have been impressed by the dearth of medical literature on short-term altitude effects and body acclimatization. Since most small mountaineering expeditions achieve their objectives in less than a month, this paper will concern itself with the changes occurring during the first weeks after a sea-level inhabitant invades altitudes above 10,000 ft.

A total concept of the altitude effects on the body requires correlation of information on the effects of several physical forces which become accentuated with altitude. This presentation will discuss these forces, their modification by altitude, body response and acclimatization, and finally some indications as to how individual resistance might be predicted.

Since much of the literature specifying elevation and temperature is divided between the use of the metric system and English system, a conversion table is provided for convenience. (Table 1)

Table 1—Conversion Tables

Temperature

Degrees Centigrade ($C = \frac{5}{9}(F - 32)$)	Degrees Farenheit ($F = \frac{9}{5} C + 32$)
18	64.4
20	68.0
22	71.6
24	75.2
26	78.8
28	82.4
30	86.0
32	89.6
34	93.2
36	96.8
38	100.4

Altitude

(one meter = 3.281 feet)

Meters	Feet
1000	3281
2000	6562
3000	9843
4000	12238
5000	16404
6000	19685
7000	22966
8000	26247
9000	29528

physics of increasing altitude

Increases in altitude present four distinct stresses to the human organism. These are: 1. Decreasing temperature. 2. Increasing ultraviolet radiation. 3. Decreasing barometric pressure. 4. Decreasing partial pressure of oxygen.

Dr. Mason is Director, Dept. of Anesthesiology, Providence Hospital, Everett, Washington, and Clinical Instructor, University of Washington School of Medicine.

The author wishes to acknowledge, with gratitude, the helpful suggestions offered by Thomas F. Hornbein, M.D., in the preparation of this manuscript.

Temperature. For every 1,000 ft. of altitude the temperature decreases about 3.5 degrees Farenheit, Table 2. Ascent will necessarily be accompanied by the problems of frostbite and general body cooling unless adequate protective clothing is worn.

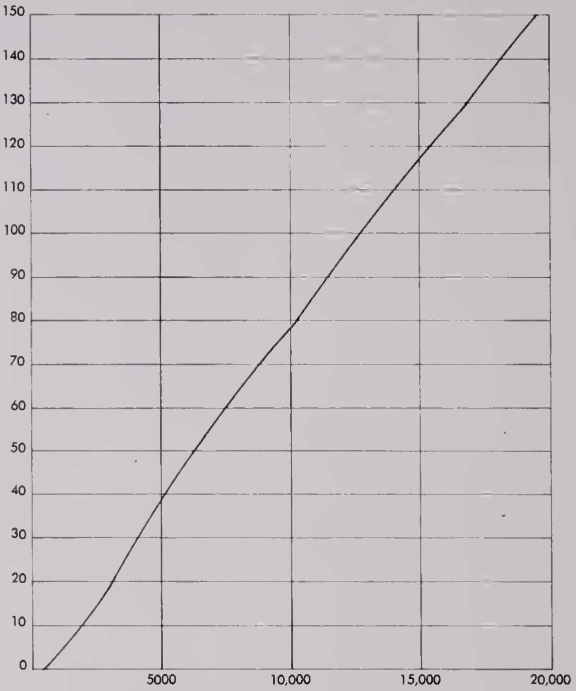
Ultraviolet Radiation. The solar radiation that reaches the earth's surface must first pass through the earth's atmosphere. During its passage it is modified by absorption. The total absorption depends upon the amount or thickness of the layer of atmosphere traversed. The radiation passes through more atmosphere when it strikes the earth tangentially than directly. Thus the air mass traversed depends on several factors, including time of day, time of year, latitude, and elevation above sea level. In addition, absorption occurs as a result of an ozone layer at about 80,000 ft., and as a result of atmospheric turbidity created by clouds, fog, haze, dust, and smoke.

While some of the radiation is absorbed and dissipated into other forms of energy, some is bounced about or scattered. As a result of this scattering in the atmosphere, a very significant amount of ultraviolet reaches the earth's surface from the sky (sky radiation) instead of directly from the sun. On a clear day at some hours the amount of ultraviolet falling on a horizontal surfact from the sky may be greater than the amount directly from the sun, and at all hours it is comparable in amount.

Because of the indirect reflection from the clouds and sky, the amount of ultraviolet radiation at the earth may be greater on days when the sky is covered by high, thin, cirrus clouds than on cloudless days.

The direct solar ultraviolet intensity increases with altitude above sea level, due to a decreasing thickness of atmosphere with less absorption. In contrast, the sky radiation decreases with altitude, since the lower, more turbid atmosphere is responsible for most of the scattering. Measurements of the combined direct and sky radiation (wave length not specified) on a horizontal surface showed an increase of 15 per cent per kilometer (3,281 ft.) in the Alps.[1] The increase would be greater in a more turbid atmosphere, or with reference to shorter wave lengths.

Although the total amount of energy at high altitudes is significantly greater than at sea level, its erythemic effectiveness at high altitudes may be increased out of proportion to its intensity because a relatively greater amount of radiation near the short-wave end of the spectrum is present. This occurs since scattering is most pronounced for the short wave lengths in the blue and ultraviolet. (Interestingly it is the scattering of the short wave lengths of light that accounts for the blue color of the sky. If light only reached the earth in a straight-line path from the sun, the sky would appear black, no light coming from it.) Changes in the energy distribution near the short-wave end of the spectrum will have a most pronounced effect in producing erythema. Energy at 2950 A is about one-hundred times as effective in producing erythema as energy at 3150 A. Consequently effects at altitudes are observed due to amounts of radiation very small in comparison with the total ultraviolet.



The accompanying graph depicts the increase in direct solar intensity (wave-length 2950 A) with increase in altitude near noon in June at 50 degrees latitude North in a normally clear atmosphere.

An additional problem occurs at altitude from snow, reflecting about 75 per cent of the ultraviolet radiation.[2] This leads to severe sunburn in areas not directly exposed, e.g. inside the nostrils and ears, and under the chin.

Barometric Pressure. As altitude increases, the pressure or weight of the air mass on man becomes less, simply because some of the weight is now below him, Table 2. It is this lowered pressure which allows gases to expand and exert pressure against closed containers or body spaces. Also at lowered pressure water boils at lower temperature, evaporation occurs more rapidly.

Table 2—U. S. Standard Atmosphere

Altitude (Feet)	Pressure (Mm of Hg)	Temperature C	F
0	760.0	15.0	59.0
2000	706.6	11.0	51.9
4000	656.3	7.1	44.7
6000	609.0	3.1	37.6
8000	564.4	−0.8	30.5
10000	522.6	−4.8	23.3
12000	483.3	−8.8	16.2
14000	446.4	−12.7	9.1
16000	411.8	−16.7	1.9
18000	379.4	−20.7	−5.3
20000	349.1	−26.6	−12.3
22000	320.8	−28.6	−19.5
24000	294.4	−32.5	−26.6
26,000	269.8	−36.5	−33.7
28000	246.9	−40.5	−40.9
30000	225.6	−44.4	−48.0

Total barometric pressure (Pb) can be expressed as the sum of the weights or partial pressures of the major component gases.

The relative percentage composition of dry atmospheric air does not vary appreciably with altitudes up to 70,000 ft.[3]

Partial Pressure of Oxygen. The most stressful result of a low barometric pressure is the lowered partial pressure of oxygen in inspired air. An additional problem occurs as result of the fact that the partial pressures of carbon dioxide and water vapor in the alveolar air show a tendency to remain constant. The formula for total barometric pressure is also applicable for the pressure and composition of the alveolar air.

Since P_{CO_2} *and* P_{H_2O} remain relatively constant as altitude is increased, decreases in P_B are mainly reflected in P_{O_2} and P_{N_2}. Consequently carbon dioxide and water vapor occupy an increasing percentage of total pressure or volume in the lung as altitude is increased:

Sea level

$$P_B = 760 \qquad P_{CO_2} = 40 \qquad P_{H_2O} = 47$$

$$\frac{40 + 47}{760} = \frac{87}{760} = 11 \text{ per cent}$$

18,000 ft.

$$P_B = 380 \qquad P_{CO_2} = 31 \qquad P_{H_2O} = 47$$

$$\frac{31 + 47}{380} = \frac{78}{380} = 21 \text{ per cent}$$

29,000 ft.

$$P_B = 236 \qquad P_{CO_2} = 24 \qquad P_{H_2O} = 47$$

$$\frac{24 + 47}{236} = \frac{71}{236} = 30 \text{ per cent}$$

effects of high altitude

Temperature. This section will discuss how heat is lost from the body, and how the body reacts and acclimatizes to cold.

Mechanisms of heat loss. Heat is normally lost from the body via four mechanisms: 1. conduction. 2. convection. 3. radiation, 4. evaporation. Several of these are greatly accentuated at altitude, especially during mountaineering.

Conduction. While air is a very poor conductor, which accounts for the efficiency of clothing with air cells as insulators, often climbers are exposed to excessive heat loss by conduction through wet or matted clothing on rock, ice, or snow. Great loss also occurs with the handling of metal objects such as ice axes, pitons, stoves, and cameras.

Raising the temperature of inspired air constitutes a significant loss during hyperventilation. Urinary and fecal heat loss is usually less than 2 per cent.[4]

Convection. Relative humidity of the external air has little effect upon heat loss through convection. The most important influencing factor is air movement. Wind greatly increases heat loss up to a velocity of around 70 miles per hour. Above this little further effect occurs. Wind is an almost constant companion at high altitude. Drawstring and elastic cuffed clothing of windproof material diminish the problem.

Radiation. Half or more of the total heat loss occurs through radiation.[4,5] The human skin is an almost perfect radiator, i.e., it radiates nearly all infra-red rays or absorbs to the same extent all rays that fall upon it. The temperature of surrounding objects in relation to skin temperature is the main factor determining heat loss. Air intervening between the body and an object is not heated by radiant energy, but primarily by convection.

Through radiation the body is heating much of the inner clothing, which then must be insulated against loss to the environment.

Heat loss from the uncovered head can be enormous. Hedblom states that heat loss from the unprotected head my be 1/3 of total body heat production at 60 F, 1/2 at 40 F, and 3/4 at 5 F.[6] This is especially interesting in connection with the custom of natives of India of piling most of their clothing about their heads in cold weather.

Body Response to Cold

Initial Compensatory Response	Late Decompensated Response
1. Shivering. Onset in 4 to 55 minutes; periodic in nature. Controlled by skin temperature, rate of cooling, and severity of cold.[7] Intensity related to rectal temperature.	1. Ceases at rectal temperature 30 to 33 C. Succeeded by muscular rigidity.[8]
2. Increased oxygen consumption, (metabolic rate). Three to six times the basal level, increasing to the level of strenuous exercise; taking some 30 minutes to reach a maximum. Heat production is primarily due to the muscular work.	2. Does not persist after rectal temperature has fallen to 35 C.[15, 25]
3. General peripheral vasoconstriction. Involves arterial and venous systems, shunting blood to central organs. Trunk cools more slowly than extremities, and face cools least of all body surfaces.[9]	3. This vasoconstriction eventually occurs in the pulmonary circulation as well as the systemic, probably due to direct action of cold blood on the arterial smooth muscle resulting in enormous peripherial resistance.[10]
4. Heart rate increased—until the rectal temperature begins to fall.	4. If cooling is continued the rectal temperature begins to fall, and the heart rate decreases linearly with the fall in body temperature.[11, 12] Below 28 C varying degrees of heart block, ventricular extrasystoles, or nodal rhythm may occur.[13] Further cooling finally produces cardiac asystole or ventricular fibrillation.[14, 15]
5. Cardiac output increased.	5. At 25 C there is a reduction in cardiac output. There is a direct effect of cold on the sinus pacemaker for cardiac slowing is not abolished by atropine or vagotomy.[16-18]
6. Blood pressure elevated.	6. Gradual decline as body cooling occurs; at 25 C there is a rapid onset of severe hypotension.[19]
7. Blood volume decreased due to hemoconcentration. Occurs after several hours of deep hypothermia. Occurs after three or four days of exposure to moderate cold, but returns to normal with continued moderate exposure.[20, 21, 22]	7. Deep hypothermia produces loss of plasma from the circulation in a shocklike manner.
8. Pulmonary ventilation increased. A fall in alveolar CO_2 occurs.[23] There is an increase in anatomic and physiologic dead space through bronchodilatation.[24]	8. After the initial increase, there is an almost linear relationship between the fall in body temperature and the decrease in respiratory rate and depth.[23] At 24 C a respiratory crisis occurs, minute volume decreasing to zero. At 25 C the annatomic dead space is increased by 50 per cent.[24]
9. Cerebral blood flow decreased—6 to 7 per cent per degree centigrade drop with a resulting decline in cerebral oxygen consumption.[26]	9. At 25 C there is a reduction of 60 to 70 per cent in flow.[26] Unconsciousness occurs when temperatures drop to 26-28 C.

While the temperatures given above represent the research observations of many investigators, they cannot be interpreted too exactly, since many variations occur, e.g. the classical case of the Chicago Negro women who survived an all night exposure, being admitted to the hospital with a rectal temperature of 18 C.[27]

Evaporation. At ordinary room temperature at sea level without obvious perspiring, heat loss through evaporation from the lungs and skin amounts to from 15 to 30 per cent of the total heat loss.[1, 5]

The low barometric pressure at altitude speeds the evaporation of moisture in wet clothing, sleeping bags, and tents, frequently dampened by living amid ice and snow.

The initial response to cold suggests intense sympathetic stimulation. More prolonged or severe cooling results in a gradual decompensation or disintegration of cardiorespiratory function.

Acclimitization to cold. While there is still some divergence of opinion as to man's ability to acclimatize, man must be cold for prolonged periods, not just live in a cold climate, well-protected by his man-made environment.

Acclimatization seems to take three forms: 1. conservation of body heat, 2. increased production of heat, 3. redistribution of heat.

Conservation. A diminution in heat loss via the respiratory tree occurs.[25] The mechanism of this conservation has not been fully studied. It may occur as a result of experience and lessened cold anxiety, e.g. failure to hyperventilate in cold; breathing against clothing or through clenched teeth with the tongue toward the edge of the teeth to pre-warm the inhaled air.

Fat is a poor conductor of heat as compared to other body tissues. Residents of cold climates increase their subcutaneous fat layers, providing some protection against general cooling.

Increased Production. Although man's basal metabolic rate does not change with cold adaptation,[28] the acclimatized man produces more heat and shivers less when confronted with cold.[29] The site of this increased heat production seems to be muscular, but whether or not it is entirely due to muscular tonicity has not been definitely decided. The control is believed to be due to a complex endocrine interaction involving pituitary, adrenals, and thyroid.[30]

Most of the dwellers of cold climates rely heavily on fats in their diets. Fat produces 9 calories per gram, while carbohydrates and proteins produce only 4 calories per gram. It is necessary to consume twice as much protein or carbohydrate for equivalent fuel.

Re-distribution. The autonomic nervous system plays a most interesting function in blood distribution in the cold acclimatized man. An unacclimatized man exposed to cold will dramatically constrict the vessels in his extremities, resulting in a severe drop of extremity temperature with a resulting small increase in rectal temperature. The core temperature is thus protected at the expense of the extremities. A cold acclimatized man will allow his core temperature to drop one or two degrees in order to allow more blood to circulate in his extremities, and permit a less severe drop in their temperature.[31]

This phenomenon, in conjunction with increased production and conservation of heat, largely explains how some natives are able to sleep barefoot, outdoors, in frigid temperatures.

Blood volume seems to be increased in the cold-adapted man, but what physiologic role this plays is not as yet completely clear.[32]

Localized cooling, frequently in conjunction with generalized cooling can, of course, result in frostbite. While no acclimatization occurs other than the redistribution of blood previously mentioned, it is known that weathered, dirty, calloused hands seem to be more resistant.

It would appear that susceptibility to repeated frostbite has been overemphasized. Numerous mountaineers who have undergone cold injury of various degrees have returned to climb without obvious increased susceptibility. However, following the cold injury, an intense peripheral vasospastic reaction to moderate cold may persist for several months (eight or nine months is not unusual), but reaction usually returns to normal after that period.

To be continued

References will be carried in the concluding installment

Fecalith vs Lymphoid Hyperplasia in Acute Appendicitis

DANIEL F. BROWN, M.D., Denver, Colorado, and **CHARLES E. BUCK, M.D.**, Longview, Washington

Obstruction and subsequent inflammation in the appendix are caused most frequently by lymphoid hyperplasia or fecalith. A study of 78 cases of acute appendicitis was undertaken to answer the question about differences in clinical manifestations. The lymphoid hyperplasia group comprised younger patients but there were no significant differences in symptoms and signs between the two groups.

The significance of obstruction in the pathogenesis of acute appendicitis has been well documented.[1] Increased luminal pressure is believed to result from appendiceal obstruction with resultant vascular stasis, edema of the wall and the progressive accumulation of bacteria and bacterial products in the lumen. This is followed by acute inflammatory changes including further vascular engorgement, edema, polymorphonuclear leukocytic infiltration of the wall, and fibrinous exudate on the serosa.

For purposes of definition, a fecalith is recognized as a discrete, firm, fecal mass which fractures rather than molds on pressure.[2] Lymphoid hyperplasia is recognized when the lymphoid tissue of the mucosa presents marked hyperplasia resulting in sufficient mucosal thickening to cause marked encroachment on, or near obliteration of, the appendiceal lumen. This is usually most striking when in the proximal end of the appendix.

In this study the records of 39 patients with fecalith and 39 patients with lymphoid hyperplasia were reviewed. Each group was selected from the diagnosis index files of the pathology department of a small community hospital. Each group represented the 39 most recent cases carrying the diagnoses studied. The clinical record of each patient was reviewed as to age, duration of symptoms, presence of periumbilical pain, rebound tenderness, guarding, fever and leukocytosis.

Fifteen of the patients in the lymphoid hyperplasia group were age 10 or under and 20 were 11 to 20 years old. In the fecalith group, only 3 were 10 or under, 22 were between 11 and 20 years and 10 were in the 21-30 group, Table 1.

Table I
Distribution by Ages

Age, Years	Fecalith	Lymphoid Hyperplasia
0 - 10	3	15
11 - 20	22	20
21 - 30	10	1
31 - 40	1	1
41 - 50	0	1
over 50	3	1

These findings suggest that a study using groups selected on the basis of age might show a higher incidence of lymphoid hyperplasia in the younger age groups. One might suspect that appendicitis could represent a sequela of an infection causing mesenteric adenits.[3] Abundance of lymphoid tissue in children and young adults may be a factor.

Nearly equal numbers of patients in each group had onset of symptoms with periumbilical pain, Table 2. However, in both groups, a significant number had onset of symptoms with right lower quadrant rather than periumbilical pain (fecaliths: 33 per cent, lymphoid hyperplasia: 39.4 per cent). The degree of leukocytosis was essentially equal in both groups, as was the presence of the physical finding of rebound tenderness and guarding. The mean duration of the symptoms from onset of initial complaint until arrival at surgery was also equal.

This study was done, and the manuscript submitted, while Dr. Brown was a senior medical student at the University of Oregon Medical School. He is now an intern at Fitzsimons General Hospital, Denver, Colorado.

Table 2

	Fecalith	Lymphoid Hyperplasia
Symptoms originating with periumbilical pain	26	24
Patients never experiencing periumbilical pain	13	15
Leukocytes		
Normal, 10,000	4	5
10,000 to 20,000	24	29
greater than 20,000	11	5
Signs		
Rebound tenderness (only)	16	10
Guarding (only)	1	6
Both	12	13
Duration of symptoms from onset of initial complaint until surgery (average)	27.3 hrs.	24.6 hrs.
Temperature		
Above 101.1 F.	6	5
99.1 to 101 F.	14	18
99 F. or less	19	16
Perforation	6	1

The occurrence of similar symptoms in the 3 to 4 months prior to surgery was recorded in the clinical histories of 6 of the 39 patients with lymphoid hyperplasia. Only one record in the fecalith group recorded such a history. This suggests that what has been called relapsing or recurrent appendicitis represents symptoms related to lymphoid hyperplasia of the appendiceal mucosa or the mesenteric lymph nodes.

Fever was an inconstant finding—35 of the 78 patients in the study had a temperature of less than 99 F. Of the 11 patients with temperatures greater than 101 F, four had perforated appendices at the time of surgery.

summary

The clinical records of 78 patients with pathological diagnoses of fecalith or lymphoid hyperplasia of the appendix were reviewed. Symptoms and physical findings were essentially the same in the two groups. ■

Fitzsimons General Hospital, (80240) (Dr. Brown)

abstracto

La Hiperplasia linfoide y los fecalitos son la causa mas frecuente de la obstrucción y consecuente inflamación del apendice. Se ha llevado a cabo un estudio sobre 78 casos de apendicitis aguda, para contestar a la pregunta sobre las diferencias en manifestaciones clinicas. El grupo de la hiperplasia linfoide comprendió pacientes mas jovenes pero no hubo diferencias importantes entre los signos y sintomas de ambos grupos.

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Human Renal Homotransplantation

Part IV, Post Transplant Care

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The patient whose life is saved by renal transplant has obtained his reprieve at the price of a chronic immunologic disease. He must embark on a life-long program of periodic examination, conducted by his personal physician who maintains close communication with the transplant team. Return to his own community is permitted only after stabilization of condition and establishment of adequate drug regimen. Frequency of routine visits to his physician depends on severity of rejection crises, particularly those of the first few months, and other complications. Rejection that cannot be stopped or reversed sometimes indicates removal of the transplanted kidney.

The previous three papers reviewed some fundamental aspects of renal transplantation such as immunology, histological changes in the renal transplant, histocompatibility, and methods of supression of the immunologic attack of the host against the renal graft.

In this last part, we wish to discuss management of the patient after he has been discharged to his home. Long-term success in renal transplantation depends now to a considerable degree on the physician outside the center, especially when the patient lives several hundred miles away. Recent improved results have led to increase in number of transplantation centers and number of transplants carried out. It is likely that this tendency will further increase in the future. It will be of benefit to these patients if general practitioners, internists, and other concerned physicians (including obstetricians, since a few patients with transplants have borne children) have an understanding of the basic principles and medical management.

The patient with a transplant has been given a new lease on life for the price of a chronic immunologic disease, which has similarities to autoimmune disease and could be called an alloimmune disease.* Complications from the surgical procedure itself are rare; over 90 per cent of the mortality and morbidity after transplantation is a result of decreased immunologic resistance and toxicity caused by the immunosuppressive drugs. [1,2,3,4,5,6]

As mentioned in the foregoing paper, the first three months after transplantation comprise the "adaptive phase." This is the most critical period and most deaths and serious complications fall into it. The patient should remain ambulatory near the center until he is free from major complications and has reached a stable state. Analyzing the adaptive phase, the patients fall roughly into three groups. (Figures 1, 2, 2a, 3b.)

Group 1. Patients who develop sastisfactory host-graft adaptation and are free from serious complications. A stable immunosupressive drug maintenance dosage (azathioprine and prednisone) has been achieved, resulting in satisfactory immunosuppression and graft protection in the absence of signs of drug toxicity (bone marrow depression, infections).

With proper selection of patients (see Part 2, Northwest Med 66:639-644 (July) 1967.), close to 50 per cent of related live donor transplants and about 25 per cent of cadaver donor transplants can be expected to fall into this group. The majority of patients in this group will be long-term survivors with satisfactory renal function. (Figure 1 illustrates such a case.)

Group 2. Patients who survive the first three months with adequate renal function, but have shown difficulties in control of rejection or severe complications such as:

1. Severe rejection episodes with loss of renal function. (Figures 2, 3).
2. Low grade, but persistent, rejection reaction in slowly progressive renal graft damage and decreasing renal function. (Figure 2).

This is the last in a series of articles on renal transplantation.

* It should be pointed out, that this "disease" could not have occurred naturally; the physician had the role of the "vector" carrying out the transplant.

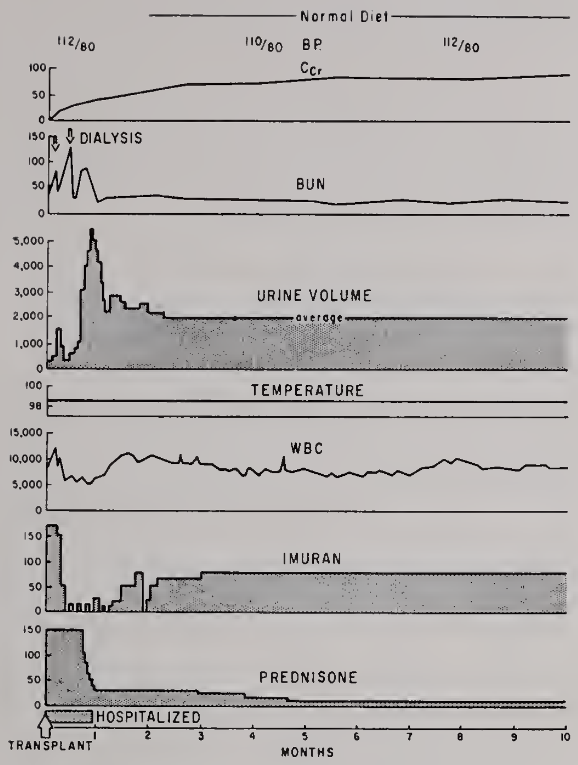

Fig. 1. Patient in group 1, age 20, MSH 15-71-26. Ccr= creatinine clearance.

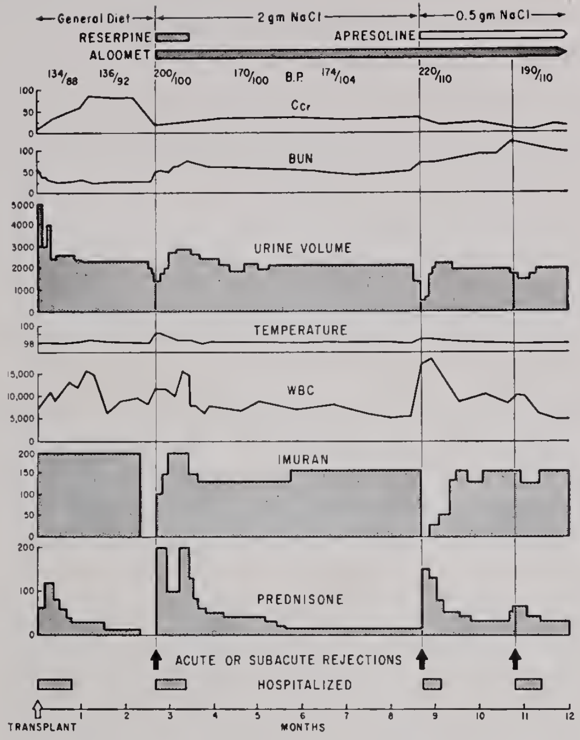

Fig. 2. Patient in group 2, age 19, MSH 36-10-80.

3. Difficulty in establishing an optimal stable maintenance immunosuppressive drug regimen due to high requirements or poor tolerance of these drugs, or both. This increases the danger of an acute bone marrow depression considerably. (Figure 3a)

4. Persistent or recurrent infections. (Figure 3a)

5. Elevation of blood pressure, either longstanding prior to transplantation or secondary to chronic rejection. (Figure 2)

6. Complications, such as gastrointestinal bleeding, pancreatitis, neuropathies, steroid diabetes, urinary obstructions, vascular anastomotic stenosis, psychological maladjustments, and others.

Figure 2 illustrates the course of a patient who would fall into this group.

Group 3. Patients who develop severe or relentless rejection crises. This may frequently push the physician to order high dosages of corticosteroids (prednisone or methylprednisolone) and azathioprine and may lead to death of the patient as a consequence of bone marrow depression and overwhelming sepsis. A less heroic, but wiser attitude of the transplantation team, would be earlier recognition of failure and removal of the grafted kidney to permit elimination of immunosuppressive drugs.

Figure 3A illustrates the postoperative course of a patient who succumbed to a retroperitoneal abscess and drug toxicity. His transplanted kidney functioned well until death and showed histologically only scattered areas of lymphocytic infiltrates. Figure 3B illustrates course of another patient who demonstrated a severe, relentless rejection. His renal graft was removed; he recovered and was put back on intermittent dialysis twice weekly as an outpatient and considered for home dialysis. Unfortunately, he died of serum hepatitis five months later.

Patients in Group I probably constitute a fortuitous selection of good histocompatibility matches. Reliable, prospective histocompatibility matching should enable us to select a larger percentage of candidates who would fall into Group 1.

Realizing that immunologic reaction against the graft is only suppressed — not extinguished, the physician has to be on constant lookout for flare-ups. The rejection reaction has many similarities to the spreading of a fire; if early recognized, effective measures may control it before irreversible damage has occurred to the transplanted kidney. If anti-rejection therapy begins too late, it may be impossible to reverse the reaction or even to stop its progress. A large number of nephrons may be destroyed permanently, resulting in decreased renal function.

Table 1 in the foregoing paper (Northwest Med 66:724-728 (August) 1967.) lists several symptoms and signs of an impending rejection crisis. Figures 2, 3A and 3B illustrate acute or subacute rejection episodes. Decrease in urinary volume, rise in serum creatinine and urea, and decrease in creatinine clearance frequently reflect renal damage secondary to heightened immunologic activity of the host. Unfortunately, no reliable and simple tests are yet available to detect increased immunologic activity before the graft shows decrease in fuction.

Other signs are elevation of temperature, increase in white blood count, general malaise, nausea, weakness and lethargy, renal tenderness and swelling (intersitital edema and cellular infiltration) or elevation of blood pressure (renal vascular leisons). The immunosuppressive drugs may disguise some of the latter findings. Elevation of temperature and an increased white blood count may also signal an infectious process. Frequently, differential diagnosis between rejection reaction and infectious process can be made only by careful questioning of the patient and thorough physical and radiologic examination. If no evidence of an infectious focus can be found, rejection reaction is likely. Decrease of renal function, which can be quantitatively followed by doing sequential creatinine clearance studies favors the diagnosis of a rejection crisis if intravenous pyelograms and renal angiograms have ruled out urinary or vascular obstructive lesions. (This has usually been done at the center before discharge.)

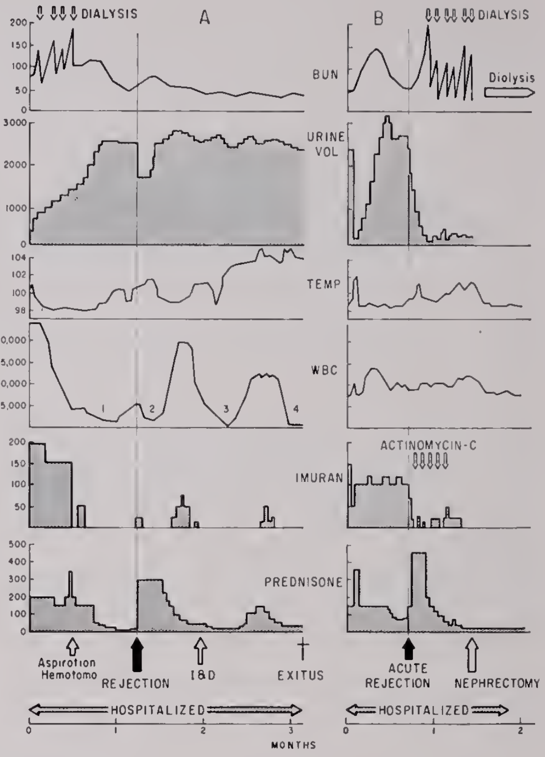

Fig. 3A. Patient in group 3, age 24, MSH 28-08-85.
Fig. 3B. Patient in group 3, age 36, MSH 37-03-80.

Before discharge, the patient is alerted to the symptoms and signs of a rejection reaction and infectious processes that may appear after discharge, and admonished to notify his local physician or the physicians at the center *immediately* when such signs occur. Since a rejection crisis or infectious process may develop more insidiously, the patient should be examined by a physicians once a week, at least during the first six months, or until his course has become stable. Serum creatinine and white blood count should be done at each visit, to detect changes in renal function or a leucopenia below 5,000 cells/mm^3.

Once a month, or if indicated more frequently, the patient must come to the center for more detailed examination, including quantitative renal function and serum electrolyte studies. (creatinine, sodium, potassium clearances, etc.) Azathioprine and prednisone dosages are adjusted to achieve optimal immunosuppression. It is attempted to keep the white blood count between 6 and 9,000 cells/mm^3. If renal function decreases, azathioprine dosages must be lowered or omitted for the period of low renal function since it has been shown to have increased toxicity for bone marrow in the presence of inadequate renal function. Patients in Group 1 (Figure 1) can be satisfactorily followed in this way.

Figure 1 illustrates the course of a 21-year-old mother who has done well for almost one year after renal homotransplantation. She lives a normal, productive life, tolerates a normal diet, and is not restricted in her activities.

responsibility of the personal physician

The local physician's chief task is the detection of any changes in the patient's progress. If he should discover signs of rejection, infection, bone marrow depression, hypertension, weight gain, decreased renal function, or other abnormalities, he should relay this information by phone to the physicians of the transplant team and discuss with them whether the patient should be readmitted to the center or what therapeutic measures should be carried out locally. The majority of complications can be discovered by history, physical examination, and the usually available x-ray and laboratory procedures. Early diagnosis and good communication between the local physician and the transplant team will assure prompt and proper treatment.

Patients in Group 2 will require more frequent and detailed medical supervision. Figure 2 illustrates such a case. The patient made good progress during the first two and one-half months after transplantation. He had good renal function and had resumed his normal activities except his profession. He was followed at weekly intervals at the center or by his local physician. After 10 weeks, he felt so well that he became careless. He neglected to take azathioprine and prednisone regularly. He became ill with general malaise, headaches, and lethargy. He felt he had the flu and did not call us until three days later, when he had become nauseated, very weak, and had noticed decrease in urinary output. On readmission, he had blood pressure of 220/110 and started to convulse. A diagnosis of acute hypertensive encephalopathy, secondary to vascular type of acute rejection, was made.

This was vigorously treated (Figure 2) with high dosages of prednisone, antihypertensive drugs, and irradiation to the renal transplant. Azathioprine dosage was lowered but in the presence of increased urinary output to 2,500 to 3,000ml/day within a few days could be continued at the previous dosage. The rejection reaction was brought under control, but his renal function did not return to its previous level.

This case emphasizes the importance of maturity and emotional stability of the patient. As can be seen from Figure 2, he has had two more severe rejection crises and has gradually lost renal function. He has been placed on antihytertensive therapy and low salt diet which he follows inconsistently. Twelve months after transplantation, his creatinine clearance had decreased to 12 ml/min, though his urinary output has remained around 2,000 ml/day. His management has become more complicated, necessitating periodic hospitaliaztion since the ninth postoperative month in order to treat chronic renal failure and hypertension. Further deterioration of renal function will require removal of the transplanted kidney. The patient's lack of cooperation and reliability make him a poor candidate for second transplant.

Figures 3A and 3B illustrate postoperative courses of patients with complications such as sepsis and bone marrow depression or acute progressive rejection. Such Group 3 patients or their renal grafts may not survive the first three to six postoperative months. The management of such patients is the domain of the transplant team and is presently very difficult—and frequently disappointing. It can be expected that better histocompatibility testing, safer and more efficient immunosuppressive agents, and increased experience in the immunologice and general medical management of these patients will lower the number of serious and frequently fatal complications. Severe rejection crises and complications are much more rare after a patient has done well during the first year. Life-long, careful follow-up will still be necessary, but examination may be required at less frequent intervals. ■

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chemical nomenclature

generic	trade
azathioprine	Imuran
prednisone	Deltsone
	Deltra
	Meticorten
	Parocort
methylprednisolone	Medrol

continued on next page

abstracto

El paciente cuya vida es salvada gracias al trasplante renal, ha obtenido su supervivencia al precio de una enfermedad inmunológica crónica. Tiene que embarcarse de por vida en un programa de reconocimientos periodicos, dirigido por su médico de cabecera, que mantiene una estrecha relación con el equipo de trasplante. La vuelta a su propia comunidad se permite solamente despues de la estabilización de su estado y la institución de un adecuado regimen medicamentoso. La frecuencia de las visitas periodicas a su médico depende de la severidad de la crisis inmunológica (sobre todo las de los primeros meses) y otras complicaciones. Crisis que no se pueden frenar o revertir son indicacion, a veces, para la extirpación del riñon trasplantado.

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NEW LOOK IN POLITICAL ECONOMY?

It is unfortunate that our two major political parties are now being pulled together by the strong magnet of economic panaceas to be administered by an all-powerful central government, a government which promises to deprive men not only of their God-given rights, but what is even more disastrous to their survival as moral beings, to relieve them of their personal responsibility to the social order.

It is a mistake to think of this development as the "new look" in political economy. It is as old as history. Those who look askance at constitutional conservatives because of our alleged "nostalgia for the days of McKinley" are themselves striving to have us return to the days of Hammurabi of Babylon, some 4,000 years ago. All of the "welfare measures" now being practiced or proposed as great cosmic breakthroughs were tried then, and many times since. And they have always arrived at the same terminus, a nation of serfs dominated by a small clique of ruthless men. How can we fail to note that while hundreds of millions of impoverished and oppressed throughout the world are yearning to live under our system, we are moving steadily toward that from which they are trying to escape?

Ben Moreell, in The Freeman, July 1967

Chest Injury in Civilian Practice

JOHN M. McKAIN, M.D., Twin Falls, Idaho

Management of penetrating wounds of the chest is generally conservative; only one patient in 10 may require thoracotomy. Four case reports illustrate problems involved when there is missile penetration, shot gun injury, penetration by pointed object, and extensive, bilateral, chest wall injury with contusion of lung. Two of the four patients survived.

New medical knowledge is one of the few benefits to accrue from large-scale, wartime experience. In the field of surgery this has been the source of some advance in chest trauma, major blood vessel injury, and thermal injury.[1-10] This generator of knowledge is again active in Viet Nam where 21 per cent of more than 11,000 deaths surveyed to date where due to thoracic injury.[11]

Military knowledge, however, cannot be transferred to civilian medicine without modifications. It should also be pointed out that not all advances in the field of thoracic injury have been made as a result of war experience.[12-17]

Because of knowledge being gained in the current war, because of changing customs among our population groups, and because of advances made in available equipment, it behooves us to reconsider, occasionally, the whole picture of chest injury. A good example of change is the virtual disappearance of the ice pick and its injuries, upon which much of the early work on cardiac tamponade was based, as the icebox has disappeared from the American scene.[18, 19] Another change has been brought about by greater speeds and more horsepower on the highways. Crushed chest cases have become much more common and are a problem faced by every community hospital.

Chest injury may be classified as perforating, penetrating, or blunt trauma. In civilian practice the most commonly seen penetrating and perforating injuries are those resulting from knife wounds, bullet wounds, or shotgun discharges at close range. Automobile accidents certainly produce most of the blunt trauma, although in agricultural areas many farmers sustain chest injuries from other causes. Many of the modern concepts of treatment are illustrated in the following reports:

CASE REPORTS

Case 1. A 13-year-old school boy was admitted in March, 1966, soon after an injury that followed ignition of a homemade rocket in the garage of a friend. The missile was manufactured by utilizing the metal top of a fountain pen supported with wadding, and packed with powder from .22 caliber shell. It had a fuse made of paper. Soon after detonating one such missile, our patient was struck in the chest, fell to the ground and was unable to locate the fountain pen top. He was brought to the hospital soon after by his parents who noted blood stains on his shirt. The patient had vomited or coughed up a small amount of blood-tinged material.

Physical examination revealed a pale, white boy in slight discomfort. His pulse rate was 100, blood pressure 90/60, and there was a wound of the thorax in the left fourth anterior interspace along the sternum. The heart tones were slightly distant. The breath sounds were depressed on the left. There were no friction rubs or adventitial sounds. There was no venous distention.

X-rays revealed that the pen top had penetrated deep into the mediastinum (Figures 1, 2). Exploratory mediastinotomy was recommended. The patient was given a tentanus toxid booster, an antibiotic and eight units of blood were ordered.

It was found that the rocket had perforated the anterior segment of the left upper lobe of the lung, entered the pericardium, penetrated the right ventricular musculature in the outflow tract, traversed the pulmonary valve, and was lodged in the main pulmonary artery segment just above the pulmonic valve. There was a moderate amount of blood in the pericardial sac. The wound of the right ventricle was controlled by oversewing with nonabsorbable suture material. Attention was then turned to the foreign body itself. Only partial control of the pulmonary artery was obtained when it was entered just above the pulmonic valve. Massive blood loss ensued. It was controlled by intermittent digital pressure. The fountain pen top was removed by manipulation, and the wound was oversewn with nonabsorable suture material. There was a short period of poor cardiac function and low blood pressure that responded to rapid transfusion and brisk ventilation with pure oxygen.

The postoperative course was complicated by hemothorax on the left requiring additional chest tubes to be placed the following morning. The boy had pain, fever, and EKG findings suggesting postcardiotomy syndrome. He was digitalized immediately after surgery and placed on broad spectrum antibiotic coverage. Several electrocardiograms revealed sinus tachycardia and findings compatible

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From the Department of Surgery, Magic Valley Memorial Hospital, Twin Falls, Idaho.

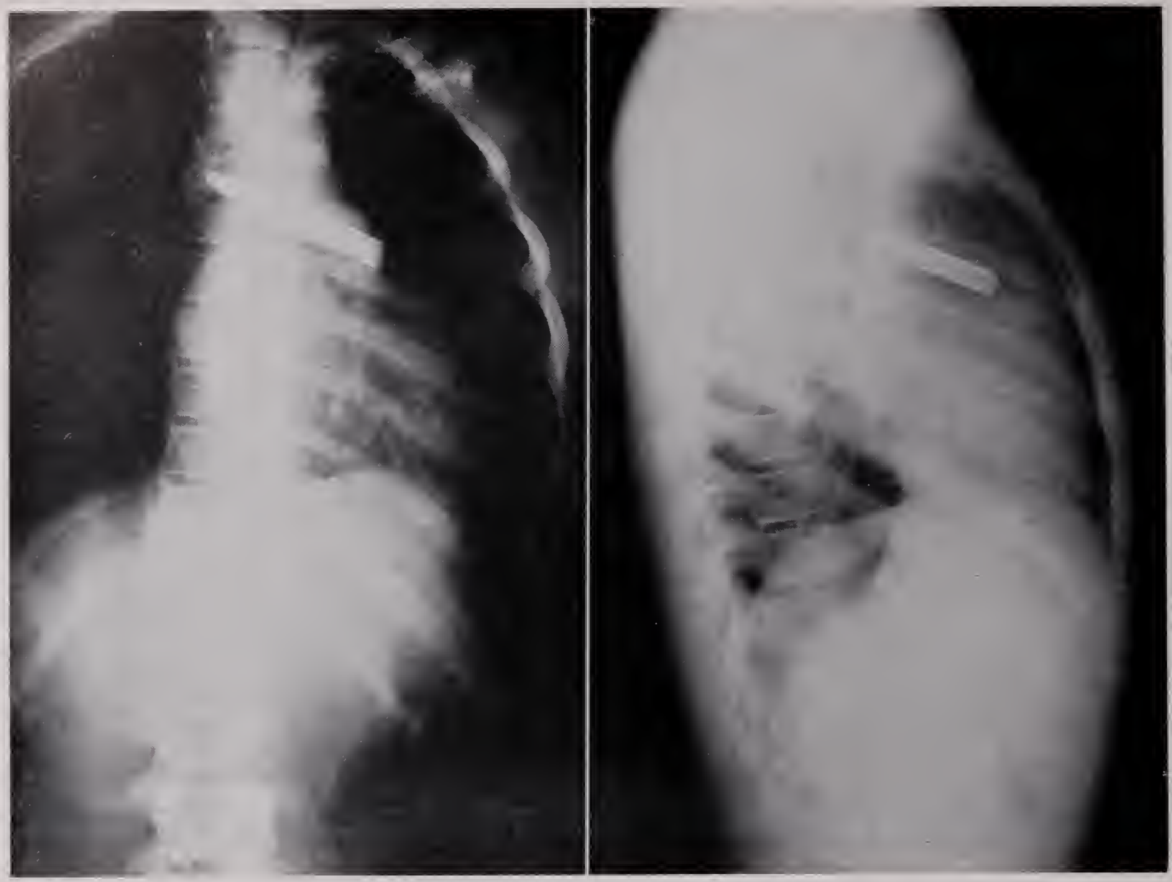

Fig. 1 & 2. Case 1, missile deep in the mediastinum.

with myocradial ischemia or pericarditis or both. There were also occasional premature ventricular contractions but no evidence of block. There was an intermittent diastolic murmur in the fourth interspace at the left sternal border suggesting pulmonary insufficiency. This was about a Grade I or II murmur on the basis of VI. He was dismissed from the hospital 10 days later.

Because of the persistence of the postoperative murmur, he had cardiac catheterization and video-angio-cardiography elsewhere. Findings supported the diagnosis of mild pulmonary regurgitation.

After six months, antibiotics and digitalis had been discontinued and activity was permitted except for contact sports.

Case 2. An 11-year-old white boy was admitted at 7 p.m. on September 4, 1966, following a gunshot wound to the abdomen which had occurred two hours previously. He had been hunting doves when a .410 gauge shotgun was discharged at close range into his supraumbilical region. The patient was taken immediately from the admitting room of the hospital to surgery, and fluids were started. Intestines presented into the wound, blood pressure was 70/40, pulse 120, and respiration 28. He was complaining of some difficulty in breathing. His color was fair. Breath sounds were audible on both sides. Attention of the operating surgeon was immediately directed to the abdominal wound, which included a large liver laceration. After this had been debrided and repaired, it was apparent that the boy was not recovering properly from his anesthetic. Portable chest x-rays were ordered. The patient was in shock. Films (Figure 3) revealed the entire right hemithorax to be opaque, with some displacement of the mediastinal structures to the left. Shot pellets were distributed through the chest. Some appeared to lie in or near the myocardium, some in the thymus, some in the lung, and others were in the chest wall. A chest tube was placed, and 1900 cc of blood removed. Rapid transfusion was begun, and eight units of blood were given. The boy expired soon thereafter.

Postmortem examination revealed that the right hemithorax contained a massive amount of blood despite the tube that was present. Pellets were in the thymus, the chest wall, the lung, and the myocardium (Figure 4). There was a laceration of the right internal mammary artery, apparently the prime source of bleeding. There was also an incomplete laceration of the right ventricle and it was felt that hemopericardium had played some role in his death.

Case 3. A 41-year-old, white farmer was admitted on May 11, 1966, complaining mainly of swelling in the left chest and left neck. He had been injured the previous afternoon by a 2 x 4 from which a nail was protruding. The nail had entered his left chest but fell away immediately. He had noticed only a spot of blood at the time but subsequently developed swelling and pain. At first he refused hospitalization. The

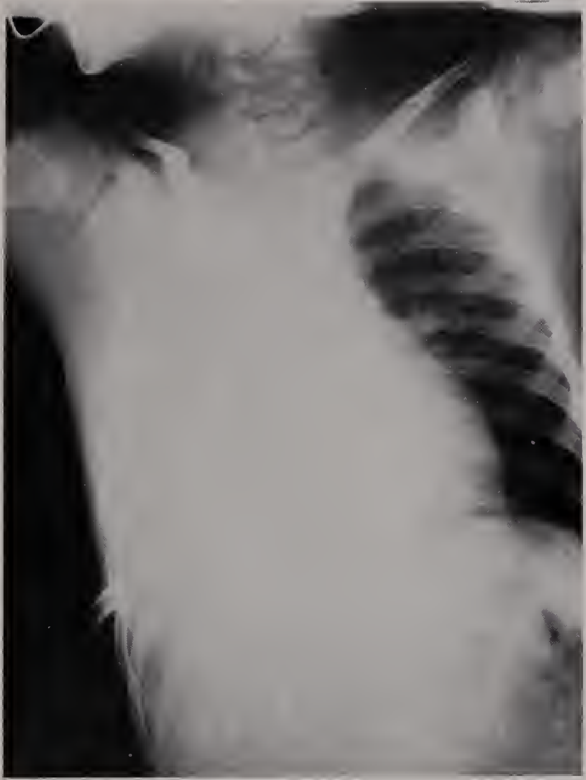

Fig. 3. Case 2, hemothorax, with chest tube in place; wide dispersal of shotgun pellets (retouched).

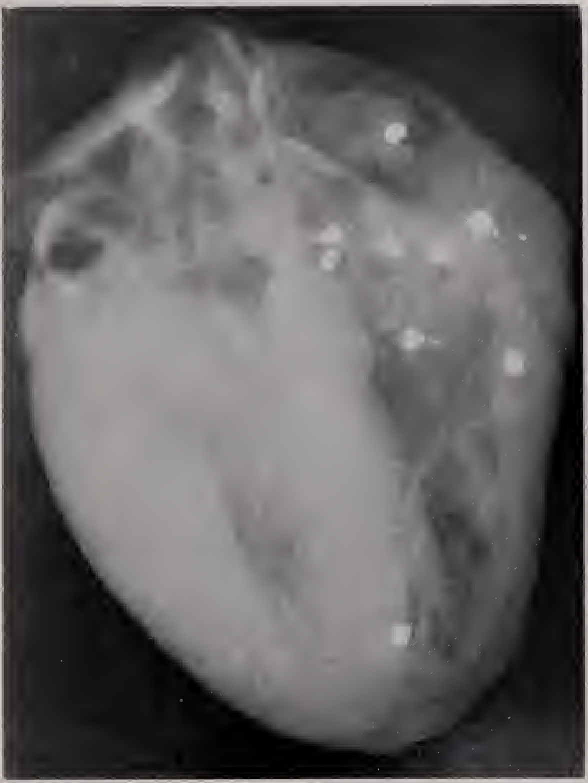

Fig. 4. Postmortem specimen, Case 2. Intraventricular septum in the sagittal plane. Note the large number of pellets stopped at the tricuspid annulus area.

following morning, because of some shortness of breath and increasing in swelling, he presented himself for admission.

He was coughing frequently. He complained of some shortness of breath and pain. Subcutaneous emphysema was readily demonstrated from the eyes down over the left anterior chest, as far inferiorly as the left groin, and down his left arm to the elbow. Breath sounds were absent on the left. The trachea seemed to be in the mid line. There was a puncture wound of the left anterior chest in the region of the third interspace. Heart tones were not remarkable. The rhythm was regular and no murmurs were heard. Examination of the abdomen was not remarkable except for subcutaneous crepitation. The admitting diagnosis was left hemopneumothorax secondary to a penetrating wound. X-rays revealed significant collapse of his left lung.

The patient was given penicillin and tetanus protection. Subsequently, he was taken to the operating room, where a large chest tube was placed in the left chest (Figure 5). About 600 cc of air and a small amount of blood were aspirated. The tube was placed to underwater seal with suction.

An uneventful recovery ensued. The tube was removed two days later, and the patient was dismissed on the fifth day of hospitalization, afebrile, with his lung fully expanded and proceding with gradual dissolution of his subcutaneous emphysema.

Case 4. An 18-year-old white school girl was admitted at 5:30 a.m. January 8, 1966, following an automobile accident. She was accompanied to the hospital by her local physician who was administering oxygen in the ambulance at the time of her arrival.

Examination in the emergency room revealed a hypoxic, struggling young female with multiple severe injuries. There was a basilar skull facture, fracture of the right thumb, and fracture of the right wrist. There was severe chest injury with multiple rib fractures on both sides and unstable chest wall. There were numerous bruises and contusions. Bleeding into the peritoneal cavity was suspected. Pulse was 120, respiration 30, and blood pressure 60 systolic. She was pale, but responding rationally and complained of severe chest pain and shortness of breath. Portable x-ray revealed increased density of lungs, multiple rib fractures, and bilateral hemopneumothorax.

Ringer's lactate was started and blood was ordered. Broad spectrum antibiotic coverage was begun and a tetanus toxoid booster was administered. She was then taken to the operating room where chest tubes were placed on both sides. Four quadrant abdominal tap was also carried out in the operating room and revealed questionable presence of blood in the right-upper quadrant.

Later the same morning, because of continuing difficulty with her airway and respiratory exchange, she was returned to the operating room where a tracheostomy was performed and a cuffed tracheostomy tube inserted. An epidural catheter was placed for segmental pain relief at this time also. Her estimated blood loss had been replaced with 2,000 cc of whole blood. That afternoon it was necessary to begin the use of a pressure cycled ventilator because of massive bilateral pulmonary contusion. The device was used throughout the rest of her hospitalization.

The following day the patient was obviously losing lung compliance and it was necessary to increase

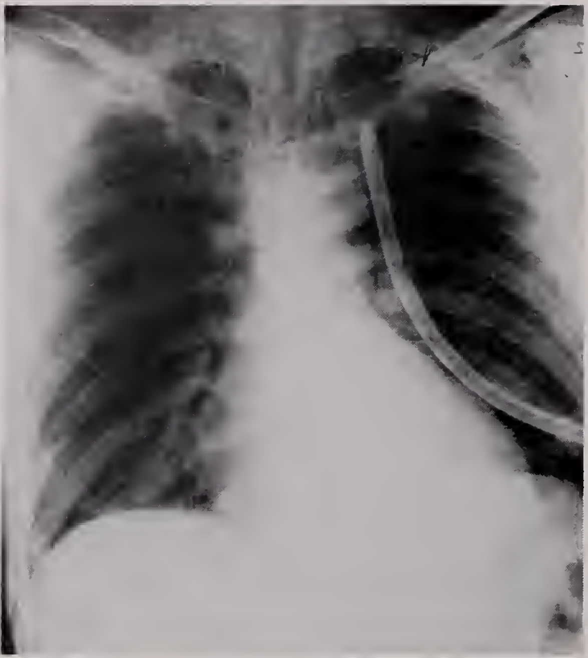

Fig. 5. Case 3, pneuomthorax, chest tube in place. Subcutaneous emphysema was demonstrated on the original film.

oxygen from 30 per cent to 60 per cent (Figure 6). Her epidural block was continued and extended in order to lessen resistance to the pressure-driven respirator and to control pain. At 5 a.m. on the ninth of January, twenty-four hours after her admission, she had the first of five cardiac arrests prior to death in the hospital. At this time, she was completely curarized and carried on curare throughout most of the rest of her life. A total dose of 590 mg of D-tubo-curare was given.

On the second postoperative day bilateral papilledema developed. Because of the fact that she was curarized, an adequate neurological examination could not be performed. She did gradually clear this papilledema, however, as her hospital course continued.

In the 11 days which this young girl survived, she had multiple cardiac arrests, severe respiratory acidosis with blood pH as low as 7.19 at one stage, and recurrent pneumothorax bilaterally requiring a total of eight different chest tubes. Because of an apparent increase in venous pressure and some peripheral edema, she was digitalized during the last two days. At this time it was felt that she was developing cor pulmonale. Also in the last five days, presumably because of severe and sustained peripheral vasospasm, she developed dry gangrene of the toes of both feet. On the 11th postoperative day, because of increasing hypoxia, cyanosis, and uncontrolled air leak, she was considered for emergency thoracotomy to try to oversew air leaks. However, she failed rapidly and died before it could be done.

The postmortem supported for the most part the clinical diagnoses with almost complete consolidation of both lungs, cor pulmonale, gangrene of the toes, pneumothorax of the left chest, multiple rib fractures, pericardial fibrinous adhesions, generalized peripheral edema, stress ulcers of the esophago-gastric junction, congestion and edema of the kidneys, lipoid depletion of the adrenals, congestion of the spleen, and multiple contusions and fractures.

discussion

The management of patients with penetrating wounds of the chest in general is conservative. Only about 10 per cent of these individuals require thoracotomy. Case 3 is a good example of one such problem. That special group, which invloves penetrating wounds of the heart, has been a subject of considerable and continuing interest and controversy.[20-26] A wide dichotomy remains today between those who would recommend immediate thoractomy and those who would manage most of these patients with pericardiocentesis.[18-19, 27-30] However, the general trend is toward operative intervention, particularly as pump oxygenator support becomes more common equipment in hospitals outside of the medical centers. When these penetrating wounds are suspected of being thoraco-abdominal wounds, or when significant tracheal, bronchial or esophageal injury results, surgery is indicated. Surgery is also indicated where air or blood leakage is severe and continuing. Cases 1 and 2 are good examples of penetrating wounds in the heart area.

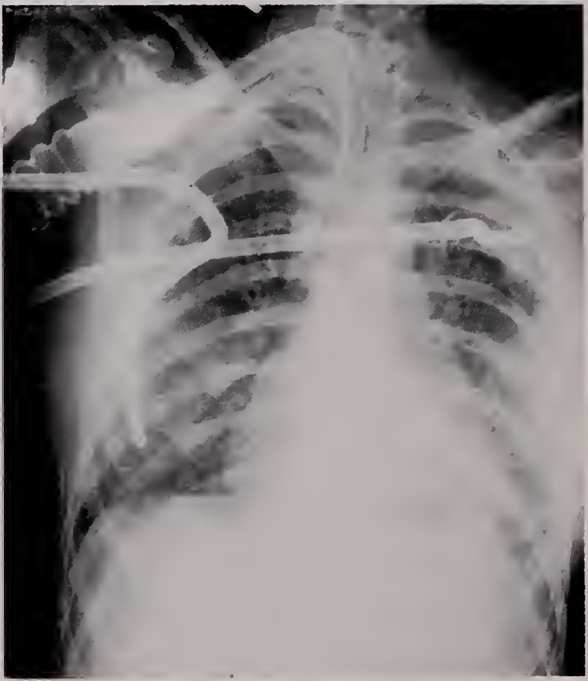

Fig. 6. Case 4, severely contused lungs, multiple rib fractures, three chest tubes and cuffed endotracheal tube in place.

The many problems in obtaining a survivor after severe crush injuries of the chest are pointed out by Case 4. Since the early reports of the value of tracheostomy in these individuals[14] much of the progress has been in the development of newer and better ventilating devices.

The current trend certainly seems to be away from use of external fixation devices and toward employment of artificial ventilation, or assisted ventilation, through tracheostomy (frequently with cuffed tubes) or endotracheal tube. It is important that the surgeon attending such an injured individual be thoroughly familiar with the devices available in his area of practice and be able to instruct those assisting him in the care of such a severely injured patient. Although we were unable to save the young girl in our hospital, cases have been saved by the use of piston-driven assistive devices and relaxation with curare-like drugs. Control of pain in the crushed chest remains an important factor in treatment, and the use of epidural block or multiple intercostal or paravertebral blocks is usually indicated. One should be ever cognizant, of course, of the false aneurysms which may result from aortic tear, usually in the descending thoracic aorta due to the deceleration that produces many crushed chest injuries.

In both the closed and the open type of injury, the hemopneumothorax of any significance should be treated with closed tube thoracostomy and negative pressure if indicated.

Many of the older concepts of therapy in chest injury remain valid ones. The sucking wound of the chest is always converted first into a closed wound. The most important early considerations are the restoration of cardio-respiratory dynamics and treatment of any existing shock. It is to be recalled that considerable blood loss into the chest can occur with very little x-ray or physical evidence. One needs to be ever mindful to the associated injuries, particularly head injuries, and also to the prevention of the late complications, such as infection. In patients with cardiac tamponade, it is important to monitor central venous pressure. Pericardiocentesis, with removal of only a small portion of blood, can be lifesaving as the operating room is being prepared. It should be remembered that any injury below the fourth anterior interspace is suspect for thoraco-abdominal involvement. And finally, the proper attention to the tracheal toilet is most important. All nurses working in intensive care areas, post anesthesia rooms, and emergency rooms should be instructed in the proper method of naso-tracheal aspiration with controlled suction and proper clean technique to prevent cross contamination. ■

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abstracto

El tratamiento de heridas penetrantes del torax es generalmente conservador; solamente un paciente de cada diez talvez requiera toracotomia. Un reporte de cuatro casos ilustra los problemas que se presentan cuando hay penetración de fragmentos, heridas de escopeta, penetración por objectos punzantes y heridas del torax con contusión pumonar extensas y bilaterales. Dos de los cuatro pacientes sobrevivieron.

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A COLUMNIST'S OPINION

You have an illness, go to a hospital, and after two or three weeks you are back in circulation. The doctor sends you a bill for $200. If you have it, and the television is almost paid for, you remit. Or you may send him $50 a month.

The hospital, however, was down with your bill weekly, and never mind the television. It totes up $522.22, including some laboratory, x-ray and those various extras which they can pile on a moderate surgery. If your illness is the punishing kind, your doctor may bill you for $350 or $500, and your hospital therapeutic x-ray and blood services may run to $1,022.22 or $2,022.21, plus a few hundred for private nursing.

So a politician comes along, or a social thinker, and says: it's these doctors. They're grasping, they're callous, they're a cartel which has you by the throat, and besides, they all drive canary-yellow Cadillacs.

It's never the blood, which you wouldn't have got thirty years ago, or the armies of technicians with roomsful of machines costing billions. It's never the millions in research on the new drugs and techniques you are paying back, and if you are insured, it's never the cost of insurance. Insurance companies run for nothing.

So it's the doctor. He's the boss, the guy who put you through the wringer. Well, you can check your bills, and see. Or you can string with the politician and the social thinker. Imagine a guy with a canary-yellow Cadillac. They ought to be reserved for the likes of Gary Cooper and Marilyn Monroe, who give you something for your money.

By Royce Brier, in the San Francisco Chronicle, Nov. 20, 1952

Statement Toward a Philosophy of Mental Health

RALPH CRAWSHAW, M.D./MARVIN GREENBAUM, Ph.D./HAROLD E. FREE, A.C.S.W.
Beaverton, Oregon

The attitude of this clinic embraces the belief that the disturbances and rewards of change are part of living in our time. This belief leads to attempts to influence the individual, the family, the community in the direction of containing the changes so they can dominate the change, rather than be dominated by it.

In 1961, while struggling to establish a small, suburban mental health clinic, we decided to write a statement of philosophy of mental health that might guide the long term development of the clinic. Such a philosophy, it was felt, could also be a lasting reference point from which concrete policy decisions could originate. The philosophy could maintain a community-staff orientation in treating patients.

Considerable time was spent by the staff, during the first year of operation, in research and discussion of values concerning mental health. The discussions were intense, at times heated, and out of the discussions developed both a clarification of goals and a strong professional bond.

In these six years it is remarkable how often the staff has returned to the statement of philosophy to see if a particular stance toward a patient or communnity issue was consistent with our goals. Perhaps it comes as a surprise that staff members in a psychiatric clinic concerned with treating patients need to take "stands" on issues. However, after six years of involvement in community mental health activities, we find it impossible to function sanely without our philosophy to guide us through the ethical, political, architectural, as well as the health and illness issues that confront a psychiatric clinic.

Ours is not a complete philosophy, but is operative in evaluating our movement toward goals. We believe with William James that if you are to know a man you must know his philosophy. Therefore, we have presented the philosophy of the Tualatin Valley Guidance Clinic as a statement through which we may be known to ourselves and to fellow workers.

STATEMENT

The Tualatin Valley Guidance Clinic should have at least two types of working blueprints for guiding the future dimensions of the program. One is an operating plan which includes the organizational structure of a clinic and the second, equally as important, is a working philosophy that will give identity and direction to the clinic operation. The philosophy of the Tualatin Valley Guidance Clinic is:

I

There are numerous ways of thinking of mental health. The following is a working concept for us:

Goal: That the individual may be able to work and love as close to his capacity as possible for the greatest length of time within the limits of a defined culture.

II

The individual contains intense drives toward health (both physical and mental) and it is our basic assumption that people, individually and in groups, wish to cultivate this constructive element in their lives. We do not seek to change, but rather to help, by clarification, this innate desire for health.

III

Health—mental or otherwise—is not a static, permanent state of affairs either within an individual, or a family, or a country. Stability of values, institutions, and personal behavior is a relatively desirable situation. But where groups of people live together, compete, merge—their influence on one another is inevitable, and this influence will always tend to introduce some degree of instability, irritability, and change. The behavior of people toward one another can be as much a source of contamination or immunization in the matter of emotional health as is the exposure to infection and accident in affairs of physical health. Therefore, dynamic stability, as contrasted to rigidity, is greatly to be desired.

The attitude of our clinic toward mental health embraces the belief that the disturbances and rewards of change are a part of living in our time; and this belief leads us to influence the individual, family, and community in the direction of containing the changes, probing them with intelligence, and, if possible, predicting them so that they can dominate change rather than be dominated by it. There are two specific by-products of this point of view:

A. We do not believe that adjustment in the sense of adapting to irrevocable conditions is by itself a desirable goal. The maxim of facing reality has to be expanded to include reality of things to come. Rather than moaning the loss of humanism due to the beginnings of automation, we should be preparing our communities for the changing concepts of working habits and pleasure outlets that automation will undoubtedly introduce.

B. We believe that an essential way to dominate change, lessen fear, and promote self- confidence in individuals, families, and communities, is to have some type of adaptable plan for living in the immediate and relatively distant future. Change from rural to urban economy is often the source of dislocation, irritability, and breakdown in solid child-rearing practices. A plan for encouraging the positive aspects of change correlates architectural, educational, vocational, and emotional developments. It is a plan that integrates, rather than tolerates, the introduction of industrialization into a community.

IV

It is believed that the process of mental health in its broader sense can exist only in a social context. It is in the exchange and communication of emotions and ideas that one exhibits one's behavior to another person. There are two important corollaries that accompany the recognized importance of the social context:

A. Feelings and sentiments are realities and must be dealt with as such, regardless of whether or not we share them.
B. Effective communication at all levels is fundamental for good human relations.

The importance of social behavior is found in the premise that mental health is a judgment of a group of individuals about the worthwhileness, acceptability, and adaptability of other individuals. Who is "diseased" depends, in part, upon who sees the subject and not completely upon some pre-defined description of an exact disease. It is to be noted that an individual can be "diseased" in certain specific social situations, but not in others, and it is here that mental disturbance is not comparable to physical illness. Somebody who is seen as very bizarre or unusual in some contexts, can often perform and act fairly efficiently under other circumstances.

V

Perhaps the most critical of the scientific questions that we should continually be posing in our attempts to understand the development of mental health is the one that asks "Who is father to the man?" Our grasp of the principles of child development and the relating of childhood experiences and characteristics to adult integrity is imperative .

We should be continually asking such questions as: Which childhood experiences are damaging and which are strengthening? Which experiences are important chronically and which acutely? There is a continual need to understand the principles of child development as they emerge, and to predict the future needs of adults. Intellectual curiosity should be followed by appropriate promotion of research into these principles.

VI

We feel that it is within the behavior of family members toward one another and in their total reaction to the community around them that many of the basic forms of human reactions are developed and consolidated. As the family unit is responsible for and makes understandable significant aspects of human behavior, it is in the understanding of family life that the fullest appreciation of the health and disturbance of individuals is to be found. By making ourselves as expert as possible in the understanding of family patterns, habits, and functions, we can be of the best service to the individual.

VII

The development of desirable values in a community can be achieved when those values are supported, by example as well as precept, by the truly influential people in the community.[1] ■

13777 S. W. Farmington Rd. (97005)

abstracto

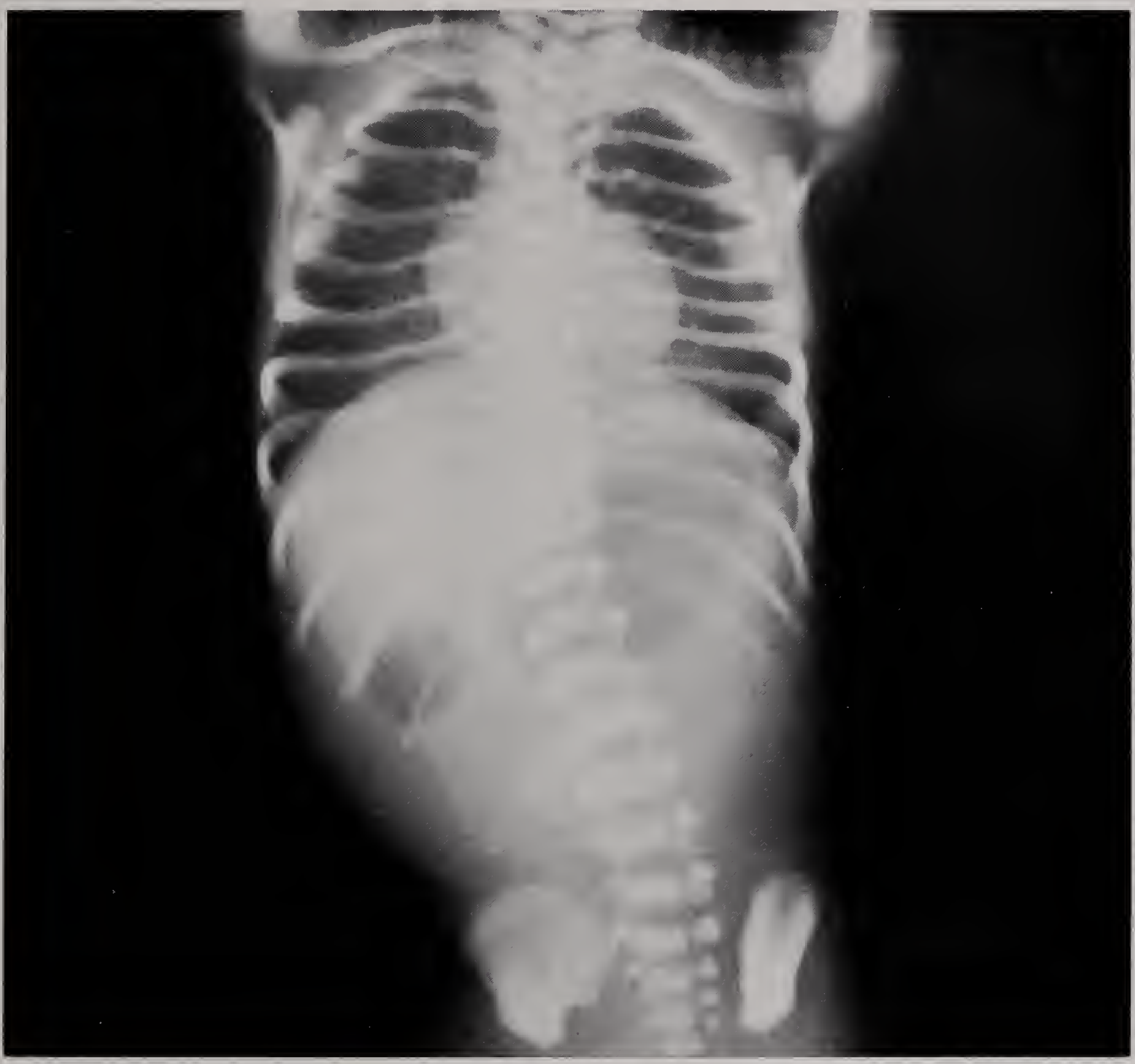
La actitud de esta clinica abraza la creencia de que los disturbios y los azares del cambio son parte del vivir de nuestro tiempo. Esta creencia nos lleva a intentar influenciar al individuo, la familia, la comunidad en el sentido de "comprender" o aprehender los cambios. De esta forma, ellos pueden dominar el cambio en vez de ser dominados por el.

REFERENCE

1 Farnsworth, D. L., Medicine's role in mental health promotion, JAMA 178:110-113, 1961.

X-Ray of the Month

SUBMITTED BY WASHINGTON STATE RADIOLOGICAL SOCIETY



A 3-day-old premature infant vomited his feedings and had produced no stools. This abdominal film was obtained. What is the likely diagnosis?

See page 965

OREGON

Oregon Medical Association —**2164 S. W. PARK PLACE, Portland, Oregon 97205**

PRESIDENT *Glenn M. Gordon, M.D., Eugene*
SECY.-TREAS. *Noel B. Rawls, M.D., Portland*
EXECUTIVE SECY. *Mr. Roscoe K. Miller, Portland*
Annual Meeting, Oct. 1-4, 1968, Portland

Lewis is Laurence Selling Professor of Medicine

HOWARD P. LEWIS, M.D.

Appropriately, Howard P. Lewis is the first educator named to the Laurence Selling Chair of Medicine at the University of Oregon Medical School. Dr. Lewis is Professor and Chairman of the Department of Medicine, an alumnus of the Medical School and has been a member of the faculty for many years.

The Selling Chair has been endowed through contributions from the many friends and admirers of the late Laurence Selling, a teacher whose sense of proportion and ability to inspire will not be lost at the University of Oregon Medical School. Those named to the professorship are to be those who will instill in students a measure of the philosophy and guiding principles that illumined all of Dr. Selling's professional life. "Hod" Lewis is eminently qualified. He has played an important and significant part in producing the graduates now practicing medicine in all parts of the world.

Last year he received the coveted Dr. Allan J. Hill Jr. Award presented by the graduating class in honor of outstanding teaching. He is a past president and regent of the American College of Physicians and for nine years was on the American Board of Internal Medicine, serving as chairman from 1959 to 1961. He is also a past chairman of the American Medical Association's Internal Medicine Residency Review Committee and from 1956 to 1960 was a member of the U.S. Public Health Service's National Institute Advisory Council.

Among the other honors he has received are the American Heart Association's Award of Merit, the Medical School Alumni Association's Meritorius Achievement Award and the American College of Physician's Alfred Stengel Award for outstanding service to the College.

fall 1967

DORSEY Season

A journal within a journal published quarterly in the interests of better medicine by Dorsey Laboratories, a division of The Wander Company, Lincoln, Nebraska. Address communications to Raymond C. Pogge, M. D., Director of Medicine.

this issue: smog, smaze or smust...

Smog, smaze or smust...effects of air pollution on upper respiratory tract

Nathan Flaxman, M.D., Diplomate, American Board of Internal Medicine, Chicago, Illinois

In Los Angeles it is *smog* (smoke and fog). In New York City *smaze* (smoke and haze). In El Paso *smust* (smoke and dust). The original factor was smoke plus such natural phenomena as fog, haze and dust, but air pollution has mushroomed from a smoke problem in our industrial cities into a major economic, esthetic and public health problem that affects practically every American locality and citizen.[1,2] Respiratory disease, of course, is by far the most costly effect of air pollution, for contaminated air can aggravate our illnesses, deplete our strength and shorten our life span.[1]

The greatest problem in dealing with solid wastes is that they are not quickly returned to dust. To aid the decomposing process, the great bulk of such waste is burned, polluting our air in the process.[3] Dr. Jack McKee of the California Institute of Technology[4] has calculated that in Los Angeles County, which has more than six million people, about three pounds of gaseous wastes per person per day (on a dry-weight basis) enter the atmosphere. This is twice as much as solid refuse disposal and six times as much as the contaminants in waste water. It is estimated that in New York City, 730 pounds of pollutants, a little over half the size of a compact two-door sedan of foreign make, is annually thrown into the air for each man, woman and child in the city.[5]

Air pollution is an evident factor, not only in the common cold and upper respiratory disease, but also in chronic bronchitis,[2] pulmonary emphysema,[6] bronchial asthma,[7] pneumonitis and lung cancer.[8] Its effect on the incidence of pulmonary tuberculosis is unproved,[9] although it is conceivable that the presence of various materials polluting the air might do this. A siege of smog in Denver, the "mile high city," in December 1965 was accompanied by respiratory infection that doubled normal absentee rates in schools, factories and city government.[10]

While air pollution is only one factor, it has become important in the causes of most of the afflictions of the respiratory tract. This has been shown not only by the Denver occurrence, but also by detailed study[2] of respiratory illness in a small group of 313 men

from October 1962 to May 1963 when there were 202 episodes involving the upper respiratory tract. The attack rate of illness was related in time to increased concentration of both smoke and sulphur dioxide in the atmosphere of the district in which the men lived.

Other factors often mentioned, include exposure to those who have colds, exposure to extreme changes of temperature, allergy and bacterial infection. However, when low individual resistance due to lack of rest, overwork, fatigue, improper or unbalanced diet, previous illness and emotional stress are included as causes, we enter the realm of somewhat obscure relationships. Much more emphasis can be placed on the role of polluted air.

The symptoms, signs and complications of involvement of the upper respiratory tract, especially the common cold, are the same regardless of the causative factor. Swelling of the lining of the nose, the scratchy dry throat, the discharge from the nose at first watery then thicker, discolored and more tenacious, the eyes tearing, and frequent sneezing are all part of the Number 1 human ailment. Concurrent or residual sinusitis when mucus is trapped there, middle ear involvement due to interference with drainage, laryngitis and bronchitis are complications of the common cold. The primary interference is with a most important function of the nose—the cleansing of foreign matter in the first line of "air defense" to prevent it from entering the breathing tract.

However, the diagnosis and subsequent decision on how to treat the patient so affected rests basically on the relief of symptoms that cause him the misery. The stuffed, runny nose, the clogged ears, and the harsh dry cough—all the symptoms that make common cold sufferers feel miserable and interfere with their sleep—can be alleviated with medications of the oral nasal decongestant/antihistamine combination type. The burning sensation in the throat, soreness of the chest and even chest pain can also be relieved by such medication. Rest in bed if there is fever (but confined to home at least), liberal fluids, uniformly warm surroundings and adequate humidity in the room, are all helpful adjuncts to the medication. Most common cold sufferers recover rapidly and are symptom-free in four to ten days.

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nasal congestion
due to seasonal
allergies and
summer colds

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Phenylpropanolamine hydrochloride	12.5 mg.
Pheniramine maleate	6.25 mg.
Pyrilamine maleate	6.25 mg.

For nasal congestion regardless of cause, you can bring quick, lasting comfort to your little patients with Triaminic Syrup. You may occasionally encounter these *side effects:* drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. *Precautions:* the possibility of drowsiness should be considered by patients engaged in mechanical operations requiring alertness. Use with caution in patients with hypertension, heart disease, diabetes, or thyrotoxicosis.

(Advertisement)

Further treatment, altered by the fact that the affliction hangs on for more than the usual duration of the common cold, requires consideration of allergy, which is most frequently the prolonging factor. But air pollution itself may often be the culprit.

(Concluded on following page)

At the Third National Conference on Air Pollution held recently, it was emphasized that this subject had received more attention in the past four years than in all previous history. Spicer,[11] an active participant at this conference, reiterated that it behooves the practicing physician to be aware of trends in respiratory disease and to accept a major role in community action relating to air pollution and respiratory health. By taking a positive stand physicians have been instrumental in the development of antipollution legislation. An outstanding example is Los Angeles where major steps have been taken by abolishing coal burning, and even banishing oil burning, seven months a year. Natural gas must be used instead and it must be used by industry when available. Backyard incinerators have been abolished in favor of landfill disposal, and building incineration ended except for a few expensive smokeless furnaces.[10] Concerted action can be taken against particular industrial nuisances. One company that disregarded complaints discovered its error when thousands of its credit cards were returned by irate customers who decided to patronize competing companies.[12]

Summary. Respiratory disease is the most important and most costly effect of air pollution, whether termed smog, smaze, or smust. Air pollution is an economic, esthetic and public health problem that affects practically every American locality and citizen. New sources of air pollution are invisible and odorless, but the harmful gases and liquid droplets are there. Triggered by sunlight, some of these undergo mid-air chemical changes and the results are even more irritating to the upper respiratory tract. The symptoms, signs and complications, especially of the upper respiratory tract, can be readily aborted by modern medication but may be unduly prolonged by polluted air. In steps taken to prevent this, the practicing physician can take a major role.

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Phenylpropanolamine hydrochloride	50 mg.
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Side effects: Occasional drowsiness, blurred vision, cardiac palpitation, flushing, dizziness, nervousness or gastrointestinal upsets.

Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

(Advertisement)

Scientific Programs in November

The Eugene Academy of Internal Medicine and the Lane County Pediatric Society are sponsoring two scientific programs in November—Medicine Day on November 7 and Pediatric Day on November 8. They will be held in the auditorium of Sacred Heart General Hospital, Eugene, Oregon.

Guest speakers for Medicine Day will be Peter H. Forsham, Professor of Medicine, Director of Metabolic Research, University of California, School of Medicine, San Francisco; Huldrick Kammer, Clinical Professor, Department of Endrocrinology, University of Oregon Medical School, Portland; and C. Alvin Paulsen, Assistant Professor of Medicine, University of Washington School of Medicine, Head, Division of Endocrinology U.S. Public Health Service Hospital, Seattle.

Guest speakers for Pediatric Day will be Vincent A. Fulginiti, Associate Professor Department of Pediatrics, University of Colorado Medical Center, Denver; and Alfred A. deLorimier, Assistant Professor, School of Medicine, Department of Surgery, University of California, San Francisco Medical Center, San Francisco.

Highlights of the two-day program follow:

MEDICINE DAY

Tuesday, November 7

9 a.m.-12 Noon—Panel Discussion
Case Presentations of Endocrine Problems: Hypogonadism, Parathyroidism, Adrenal Hyperplasia, Diabetes, Acidosis, Peter H. Forsham, M.D., Huldrick Kammer, M.D., C. Alvin Paulsen, M.D.

2 p.m.—*Modern Management of Diabetes*
Peter H. Forsham, M.D.

2:45 p.m.—*Newer Thoughts on Thyroid Disease*
Huldrick Kammer, M.D.

3:45 p.m.—*Oral Contraception and Menopausal Treatment* C. Alvin Paulsen, M.D.

6:30 p.m.—Dinner Meeting *Obesity* Peter H. Forsham, M.D.

PEDIATRIC DAY

Wednesday, November 8

9 a.m.—*Newer Concepts in Immunological Deficiency* Vincent A. Fulginity, M.D.

10 a.m.—*Management of Burns*
Alfred A. deLorimier, M.D.

10:50 a.m.—*Current Status of Measles Vaccine Adverse Reactions to Common Immunizations*
Vincent A. Fulginiti, M.D.

2 p.m.—*Wilm's Tumor and Neuroblastoma*
Alfred A. deLorimier, M.D.

2:45 p.m.—*Human Mycoplasmal Infections*
Vincent A. Fulginiti, M.D.

3:30 p.m.—*Inguinal Hernias and the Truth About Umbilical Hernias* Alfred A. deLorimier, M.D.

4:10 p.m.—*Developments in Viral Vaccines and Antiviral Agents* Vincent A. Fulginiti, M.D.

6:30 p.m.—Dinner Meeting *Current Treatment of Tracheoesophageal Fistula* Alfred A. deLorimier, M.D.

OBITUARIES

DR. RICHARD HOWELLS WELLINGTON, *88, of Milwaukie died July 4. He was born at Cincinnati, Ohio, and graduated from Rush Medical College, Chicago, in 1906. He was licensed in 1909. He was a veteran of World War I and was retired at the time of his death. Cause of death was hypostatic pneumonia, cerebral thrombosis and generalized arterosclerosis.*

DR. ALFRED A. NEWBERRY, *Portland, died July 24. He was 85. He was born at Joliet, Illinois, and was graduated in 1907 from Denver and Gross College of Medicine. He was a veteran of World War I. Cause of death was chondro-sarcoma of chest wall and pleura.*

DR. J. CARLE RINEHART, *82, of Portland, died June 24. He was born in Summerville and raised in The Dalles. In 1904 he was graduated from Oregon State College as an electrical engineer. In 1911 he entered the University of Oregon Medical School, Portland, graduating in 1915. He practiced medicine in Portland for more than 51 years. Cause of death was bronchopneumonia and cerebral thrombosis.*

DR. F. HOWARD KURTZ, *57, of Salem died July 1. He was a life-time resident of Salem. He was a graduate of Willamette University and in 1934 was graduated from University of Oregon Medical School, Portland. He served during World War II as a medical officer with the U.S. Navy. Cause of death was ventricular fibrillation due to arteriosclerotic heart disease.*

DR. JOSEPH I. CODD, *Tillamook, died June 18 at the age of 53. He was born at Spokane, Washington and graduated in 1938 from St. Louis University School of Medicine. He was licensed to practice in 1941. Dr. Codd was a veteran of World War II. He was in general practice in Tillamook for 22 years. Cause of death was myocardial infarction due to coronary artereosclerosis.*

DR. BURTON ARLAN CARLOCK, *Enterprise, died July 29. He was 35. He was born in Normal, Illinois. He received his B.A. degree from the University of Iowa and was graduated from University of Iowa College of Medicine, Iowa City, in 1957. He was licensed in 1961 and had been in general practice in Enterprise since October of that year. Cause of death was myocardial infarction.*

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- BRONCHIECTASIS

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Phenobarbital, Caution: May be habit forming	21 mg.
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Iodide contraindications: tuberculosis, pregnancy.

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MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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DR. WALTER R. STAHL, *37, of Lake Oswego, died July 30, 1967. He was born in New York City and was educated at the Massachusetts Institute of Technology and Harvard Medical School, where he received his M.D. degree in 1955. Dr. Stahl joined the staff of the Oregon Regional Primate Research Center in 1961 where he was chairman of the department of biometrics until July 1 of this year. In July he assumed a residency in radiology at the University of Oregon Medical School. Cause of death was cyanide poisoning.*

DR. CHARLES J. MARTIN, *Astoria, died June 22. He was 80. Dr. Martin was graduated from Jefferson Medical College of Philadelphia in 1914. He had lived in Astoria 9 years and was retired at the time of his death. He was a veteran of World War I. Cause of death was cerebro vascular accident.*

DR. HARLEY REX SHIELDS, *75, Portland, died June 2, 1967. He was born at Sprague, Washington and spent most of his early life in Bethel, Oregon. He was graduated from Oregon State University with a pharmacy degree. He was a veteran of World War I. In 1925 he graduated from the University fo Oregon Medical School, Portland. He was in general practice in Oregon from 1926 until his death. Cause of death was liver failure due to cirrhosis and hepatoma.*

DR. CLARENCE M. YOUNG, *Portland, died July 7 at the age of 80. Dr. Young was graduated from Chicago College of Medicine and Surgery. He had lived in Portland the past 20 years. He was in private practice from 1910 to 1932, and took post-graduate study at Harvard, Johns Hopkins and other medical schools and institutions in the East. His specialty was otolaryngology. Cause of death was occlusive coronary arteriosclerosis.*

DR. BENJAMIN FRANKLIN GIESY, *Aurora, died June 9 at the age of 92. He had lived in Aurora all his life and in April was acclaimed the oldest living graduate of the University of Oregon Medical School where he received his M.D. in 1896. He began his medical practice in Aurora in 1896 and practiced until he was 87. Cause of death was cardiac arrest due to coronary arteriosclerotic heart disease.*

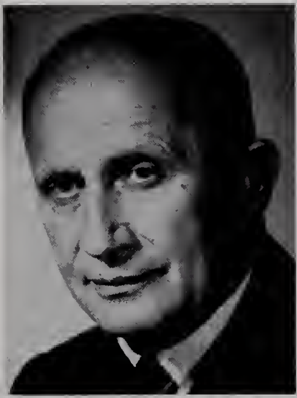
WASHINGTON

Washington State Medical Association—444 N.E. RAVENNA BLVD., Seattle, Washington 98115

PRESIDENT *Lucius D. Hill III, M.D., Seattle*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual Meeting, Sept. 22-25, Seattle

Dr. Zollinger to Deliver Strauss Lecture

Robert M. Zollinger, Professor and Chairman, Department of Surgery, Ohio State University College of Medicine, will deliver the 18th Annual Alfred A. Strauss Lecture. The announcement came from the Department of Surgery, University of Washington School of Medicine, collaborating with Dr. Strauss to sponsor the program. Dr. Zollinger will deliver "A Discussion of Ulcerogenic Tumor of the Pancreas" at 8:15 p.m., November 3, in the Health Sciences Building Auditorium.



ROBERT M. ZOLLINGER, M.D.

Dr. Zollinger's experience includes a broad scope of authorship, editorship and medical organization. His bibliography of neary 200 papers include surgical chapters in some 16 books relating to the gall bladder, gastric ulcer, gastric resection, and the spleen. Dr. Zollinger's several textbooks include his most recent second volume of "Atlas of Surgical Operations," on which he and his son, Robert, Jr., a Harvard surgeon, collaborated in 1967. Dr. Zollinger is Editor-in-Chief of the *American Journal of Surgery*.

In 1955, Dr. Zollinger with one of his residents, Edwin H. Ellison, first described a fulminating ulcer syndrome characterized by severe, recurring, frequently multiplying and atypically located ulcers not responding to ordinarily adequate and effective medical or surgical treatment. They proved that this universal pattern was etiologically related to certain benign and malignant pancreatic tumors. Since that time numerous such cases have been described, attesting to the validity of the original observations—hence the Zollinger-Ellison syndrome. Aside from the obvious importance of the recognition of the syndrome to those individuals so afflicted, an additional effect of equal importance has been to entice investigators to re-evaluate stomach hyperacidity effects possibly caused by other endocrine glands. This new research vista has already become productive, Certainly, no one in the world can speak with greater authority on this subject.

All persons in the medical profession are invited to attend the Strauss Lecture.

The Washington State Heart Association's annual symposium is scheduled for November 10 and 11 at the University of Washington.

First day's topic is "Shock: Recent advances in cardiovascular pharmacy. Second day the subject will be "Surgery for coronary artery disease with discussion on selection of patients."

Featured speakers are R. Adams Cowley, M.D., University of Maryland School of Medicine professor of thoracic and cardiovascular surgery; Arthur C. Guyton, chairman, Department of Physiology and Biophysics, University of Mississippi School of Medicine; Donald B. Effler, M.D., Department of Thoracic and Cardiovascular Surgery, Cleveland Clinic; Col. Robert M. Hardaway, III, M.D., Director of surgery, Walter Reed Army Institute of Research; Oglesby Paul, M.D., chief of medicine, Passavant Memorial Hospital, Chicago; William H. Sewell, Gutherie Clinic, Sayre, Pennsylvania, and Max H. Weil, M.D., director, Shock Research Unit, University of Southern California School of Medicine.

Washington news continued on page 948

when bursitis hits a 280–lb. tackle, hit back with Butazolidin alka

Indications: Osteoarthritis, rheumatoid arthritis, rheumatoid spondylitis, psoriatic arthritis, acute gout, painful shoulder (peritendinitis, capsulitis, bursitis and acute arthritis of that joint), acute superficial thrombophlebitis.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulr 280-lb. tackles—or 108-lb. housewives—Butazolidin alka can hasten recovery from the gonizing pain of shoulder bursitis.

s not for every patient. Check carefully the Contraindications, Warning and ecautions shown below.

nd adverse reactions may occur. The most common are nausea, edema and rash. arely, agranulocytosis has been reported. All adverse reactions are listed below, too.

lay-for-pay or workaday patients—when they come up with shoulder bursitis and your linical judgment indicates Butazolidin alka—go with it.

nd watch the comeback.

cer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur. 6509-V(B)R2

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Capsules

100 mg. phenylbutazone
100 mg. dried aluminum hydroxide gel
150 mg. magnesium trisilicate
1.25 mg. homatropine methylbromide

Dosage in painful shoulder: Initial: 3 to 6 capsules daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules daily; response is often achieved with 1 or 2 capsules daily.

For complete details, please see full prescribing information.

Geigy Pharmaceuticals
Division of Geigy Chemical Corporation, Ardsley, New York

Measles Must Go!

Washington State Medical Association and the Washington State Department of Health are collaborating on a campaign aimed at eradication of measles as an epidemic disease in Washington.

Between now and November 19, 1967, the final day of the campaign, the goal is to immunize an estimated 150,000 susceptible children in Washington and wipe out measles as effectively as previous immunization drives have stopped polio. County medical society and local health department officials in more than 30 counties and districts across the state will act as co-chairmen in local communities responsible for mounting a maximum immunization effort.

The State Parent-Teachers Association, Washington State Pharmaceutical Association, Washington State Medical Association Auxiliary and Washington Association for Retarded Children are cooperating with the State Department of Health and the State Medical Association.

Co-sponsors of the campaign are urging parents of all children who have not yet had measles or been vaccinated against the disease to consult their family physician or county health officer immediately.

Seattle to Host Rural Health Meeting

Twenty-first National Rural Health Conference, an activity of the AMA Rural Health Council, will be held in the Olympic Hotel, Seattle, March 29-30, 1968. Emphasis will be on community activities in organizing for health. Program of the meeting will be published in the February issue of this journal.

OBITUARIES

DR. HAROLD CORNELL, *74, of Bremerton, died July 18. Dr. Cornell was born at Harper, Washington. He was graduated in 1925 from Loma Linda University School of Medicine, Loma Linda, Los Angeles. He had practiced medicine in Bremerton for 22 years. Cause of death was generalized arteriosclerosis with congestive failure.*

DR. KARLIS ALEKSANDERS APINIS, *Sedro Woolley, died July 3. He was 72. He was born in Jaunvale, Latvia, and was graduated in 1923 from Latvijas Universitate Medicinas Fakultate, Riga, Latvia (now extinct). He had lived in Sedro Woolley four years. Cause of death was myocradial infarction.*

DR. J. COLIN LINDSAY, *Ritzville, died July 20. He was 58. Dr. Lindsay was graduated from Creighton University School of Medicine, Omaha, Nebraska, in 1936 and was licensed to practice in 1937. Cause of death was metastatic carcinoma from squamous cell carcinoma of anus.*

BOOKS

RECEIVED: The following books have been received. Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

Infant nutrition. By Samuel J. Fomon, M.D., Professor of Pediatrics, The University of Iowa College of Medicine, Iowa City, Iowa. 299 pp. Illustrated. Price $10.50. W. B. Saunders Co., Philadelphia. 1967.

Lectures in medicine. By C. W. H. Havard, MA, DM(Oxon) MRCP(Lond), Consultant Physician, Royal Northern Hospital; Medical Tutor, St. Bartholomew's Hospital, London. 381 pp. Illustrated. Price $9. Warren H. Green, Inc., St. Louis. 1967.

The pathology of limb ischaemia. By J. Henry Dible, M.B., LL.D., F.R.C.P. Professor Emeritus of Pathology, University of London. 100 pp. Illustrated. Price $8.25 Warren H. Green, Inc., St. Louis. 1967.

Ciba Foundation: Caste and race: Comparative approaches. Edited by Anthony deReuck and Julie Knight. 348 pp. Illustrated. Price $12. Little, Brown and Co., Boston. 1967.

Manual of preoperative and postoperative care. By the Committee on pre and postoperative care, American College of Surgeons. Editorial Subcommittee: Henry T. Randall, M.D.; James D. Hardy, M.D.; and Francis D. Moore, M.D. 506 pp. Price $8.50. W. B. Saunders Co., Philadelphia. 1967.

Gynecologic & obstetric pathology. By Edmund R. Novak, A.B.; M.D., Asst. Professor of Gynecoolgy, Johns Hopkins University School of Medicine; and J. Donald Woodruff, B.S., M.D., Associate professor of Gynecology, The Johns Hopkins University School of Medicine. 696 pp. Illustrated. Price $20. W. B. Saunders Co., Philadelphia. 1967.

Ciba Foundation: Thiamine deficiency: Biochemical lesions and their clinical significance. Edited by G. E. W. Wolstenholme, O.B.E., M.A., F.R.C.P., F. I. Biol.; and Maeve O'Connor, B.A. 163 pp. Illus.; Little, Brown & Co., Boston. 1967.

Ciba Foundation: Development of the lung. Edited by A.VS. deReuck, M.Sc., D.IA..C., A.R.C.S.; and Ruth Porter, M.R.C.P. 408 pp. Illustrated. Price $13. Little, Brown and Co., Boston. 1967.

CHARLES D. MULLER, M.D.
Bremerton
President

CHARLES P. LARSON, M.D.
Tacoma
Vice-President

JOHN R. HOGNESS, M.D.
Seattle
AMA Delegate

WILLIAM E. WATTS, M.D.
Seattle
President-Elect

C. E. WATTS, M.D.
Seattle
1952-53 President

1967 Annual Meeting

One-thousand members of the Washington State Medical Association took part in the scientific, business and social aspects of the 1967 Annual WSMA Convention.

The House of Delegates on Wednesday installed Charles D. Muller, Bremerton, as the 78th WSMA president and elected William E. Watts, Seattle, president-elect. Dr. Watts, who will assume the presidency in September, 1968, follows in the footsteps of his father, the late C. E. Watts, also a Seattle internist who was 1952-53 president.

Edward K. Stimpson, Bellingham was awarded the WSMA annual award for outstanding community service by a physician by the House of Delegates on Sunday.

John R. Hogness, Dean, University of Washington School of Medicine, was elected delegate to the American Medical Association.

1967-68 WSMA Officers

President	Charles D. Muller, Bremerton
President-Elect	William E. Watts, Seattle
Past-President	Lucius D. Hill, III, Seattle
Vice-President	Charles P. Larson, Tacoma
Secy.-Treasurer	Carl E. Mudge, Seattle
Asst. Secy.-Treas.	Robert F. L. Polley, Seattle
AMA Delegates:	Peter T. Brooks, Walla Walla John R. Hogness, Seattle Robert B. Hunter, Sedro Woolley Waldo O. Mills, Seattle
Speaker of House	Heyes Peterson, Vancouver
Finance Comm.	William F. Mead, Seattle
Medical Def. Fd.	Donald T. Hall, Seattle

Trustees:

Warren Bergholz, Bellingham
Robert M. Bond, Walla Walla
Douglas P. Buttorff, Tacoma
C. E. Benson, Bremerton
A. Bruce Baker, Spokane
William Blackstone, Longview
Amos Bratrude, Omak
Warren J. Kraft, Wenatchee
William H. Myers, Everett
J. Walfred Wallen, Burlington
Louis S. Dewey, Pasco
LaRue S. Highsmith, Spokane
Harold L. Tracy, Moses Lake
H. Paul Dygert, Vancouver
W. Maurice Lawson, Seattle
Stanley W. Tuell, Tacoma
Herbert C. Lynch, Yakima
Thomas S. Sheehy, Seattle

Photo Highlights of

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1. The 1966-67 WSMA Executive Committee members, completing the year during the annual meeting, were (standing) President-Elect Charles D. Muller, Bremerton; Past-President and Executive Committee Chairman Carl P. Schlicke, Spokane; Vice-President Herbert C. Lynch, Yakima; and President Lucius D. Hill, Seattle. Seated are Mr. Richard F. Gorman, executive secretary and Carl E. Mudge, secretary-treasurer. 2. Over 250 friends and colleagues shook hands with the new WSMA President Charles D. Muller and Auxiliary President Mrs. Clayton T. Noonan, Seattle, during a reception in their honor Tuesday evening. 3. Past-President George H. Anderson, Spokane, receiving his gold lapel pin in recognition of his fifty years of medical practice from President Charles D. Muller, Bremerton, while Mrs. Anderson looked on. 4. New Fifty-Year-Club member John Edward Clarke, Seattle, received congratulations from his grandchildren prior to the Sunday evening Family Banquet. 5. Mr. Arthur Sullivan, Chicago, management consultant (at rostrum) and Richard M. Magraw, professor, Departments of Internal Medicine and Psychiatry, University of Minnesota, and author of "Ferment in Medicine" led a panel on changing perspectives in medicine following the opening session of the House of Delegates. 6. U.S. Food and Drug Commissioner James Goddard visited with Drs. Hill and Muller prior to the Sunday evening Family Banquet at which Dr. Goddard was guest speaker.

WSMA Annual Meeting

7. Past-presidents gathered to talk about direction taken by the WSMA. Standing are Homer W. Humiston, Tacoma, 1960-61; Lucius D. Hill, Seattle, 1966-67; Emmett L. Calhoun, Aberdeen, 1958-59; Carl P. Schlicke, Spokane, 1965-66. Seated are Robert B. Hunter, Sedro Woolley, 1963-64; Ross D. Wright, Tacoma, 1946-47; R. A. Benson, Bremerton, 1951-52; Albert J. Bowles, Seattle, 1947-48; and Dean K. Crystal, Seattle, 1962-63. 8. Mr. David A. Wold, University of Washington medical student and president of the Student American Medical Association, visits with Lucius D. Hill during the AMPAC Brunch. 9. John A. Nelson, Longview, retiring this year from the WSMA Board of Trustees and as secretary-treasurer of AMPAC, State of Washington, received sincere thanks for a job well done from Thomas H. Skrinar, Tacoma, chairman AMPAC in Washington, and Lucius D. Hill. 10. 1967 AMPAC members, WSMA and county society officers heard the latest on 1968 congressional politics from Blair J. Henningsgaard, Astoria, Oregon, chairman of the Board of Directors of national AMPAC during a Brunch Sunday morning. 11. & 12. Art exhibits during the annual meeting showed artistic talents and interests of WSMA members. Albert J. Bowes and Edmund H. Smith, Seattle, co-chaired the 1967 Art Exhibit which drew praise from all who attended.

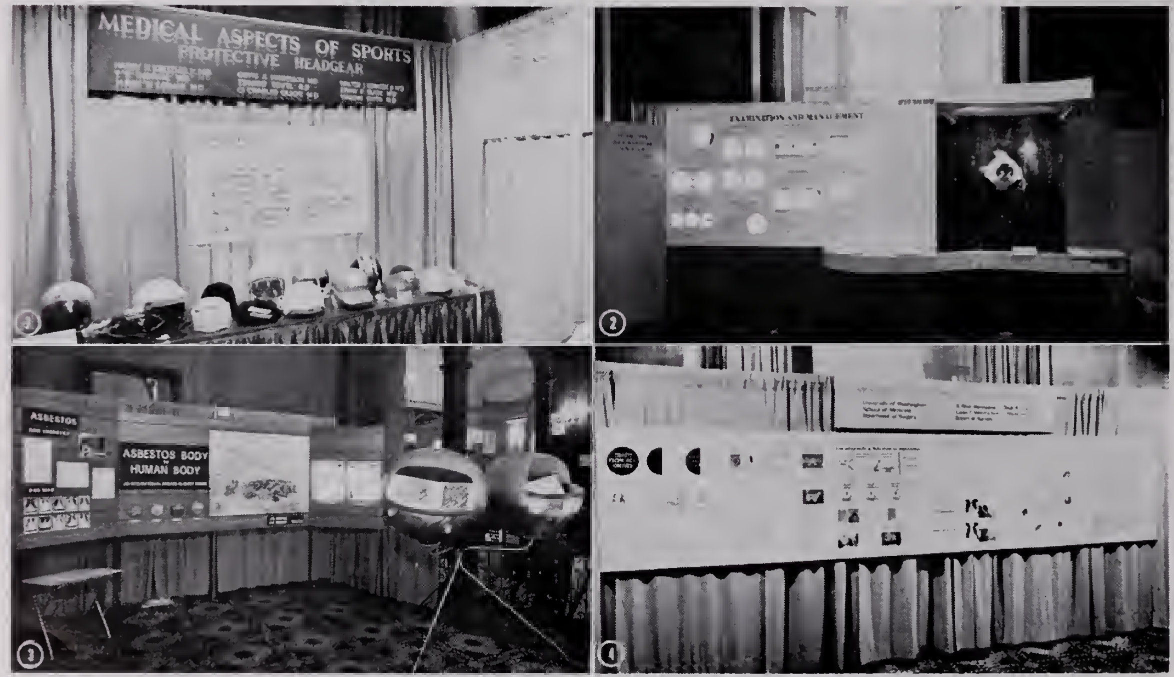
13. WSMA Reference Committee "A" reviewed the reports of the AMA Delegates, also the finance report and standing and special committee reports. Members are Elliott Bolsen, Snohomish County; W. Maurice Lawson, King County, and Arthur B. Craig, Spokane County. 14. Reference Committee "B" handled resolutions on the dispensing and sale of cigarettes in hospitals, implied consent as well as standing and special committee reports. Members are Herman S. Judd, Pierce County; Donald L. McGuiness. Yakima County, and John H. Lindberg, King County. 15. Reference Committee "C" heard testimony on the special report of the Executive Committee on government program and related Association principles and policies and handled committee reports ranging from industrial insurance to prepaid medical care. Members are Samuel T. Beall, Clark County; Robert J. Albi, Spokane County; and Howard B. Kellogg, Jr., King County. 16. Reference Committees were well attended. For the first time Reference Committees began on Monday afternoon. The House of Delegates reacted to having this additional time to review resolutions and reports prior to the final session of the House on Wednesday by directing that future Reference Committees begin Monday morning. 17. Meeting in conjunction with the Annual WSMA Meeting was the Board of Trustees of Washington Physicians Service. Standing are Raymond C. Fergusson, Seattle; Edward Z. Jones, Aberdeen; John W. L. Bond, Walla Walla, and Wayne Zimmerman, Tacoma. Seated are Harold Tracy, Moses Lake; William Tousey, Spokane; Paul Lauer, Everett, WPS president; J. J. Fairshter, Port Angeles. 18. Governor Daniel J. Evans paid a visit to the scientific exhibits on his way to address the membership on Tuesday. The Governor visits here with an exhibit author, Don Ballman, Seattle.

Convention Activities

Chairman of the scientific sessions, Robert M. Hegstrom, Seattle, and scientific exhibits chairman John D. Allen, Seattle, review the 1967 convention program with Lucius D. Hill, III, Seattle, 1966-67, WSMA president.

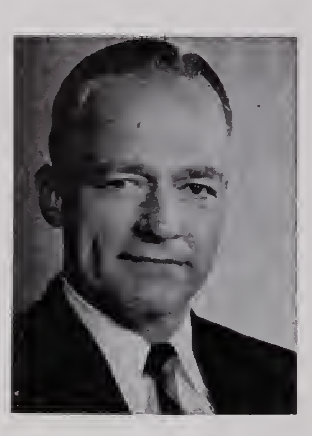
The Aesculapius Award for the best scientific exhibit went this year to Kenneth R. Wilske, Robert Stack and Don Ballman, Seattle, for their exhibit, "The Hand and Disease." Shown receiving the award from John D. Allen is Dr. Wilske.

Scientific Exhibits


MEDICAL ASPECTS OF SPORTS
PROTECTIVE HEADGEAR
1
EXAMINATION AND MANAGEMENT
2
ASBESTOS
ASBESTOS BODY vs HUMAN BODY
3
4

Four of the scientific exhibits on display at the Annual Meeting are pictured above. 1. Medical Aspects of Sports, Protective Headgear, by Harry H. Kretzler, Jr., Seattle; Orvis A. Harrelson, Tacoma; T. R. Ingram, Olympia; Walter J. Kennedy, Jr., Yakama; James D. Layman, Seattle; O. Charles Olson, Spokane; Edward Reifel, Seattle; Erwin R. Slade, Snohomish; and Vaughn Smith, Wenatche. 2. How to Aproach an eye, by Dan M. Gorden, New York. 3. The Asbestos Body vs The Human Body, An Occupational Hazard in Puget Sound, by John M. Sproul and David G. Mason, Seattle. 4. Homograft Replacement of the Aortic Valve, by K. A. Merendino, David H. Dillard, Loren W. Winterscheid, Hitoshi Mohri, and Robert W. Barnes, Seattle.

Presidential Address



LUCIUS D. HILL, III, M.D.

Voluntary or Government Dominated Medicine?

Personal or voluntary medical care faces extinction. Government dominated medicine prevails in almost every country in the world outside the United States, and the issue of whether or not personal patient care can survive is being settled in this country now. If our present system is to survive and expand, its superiority must be clearly demonstrated. Its value to the patient, not the doctor, must be made clear. If the value of voluntary medicine cannot be defined, survival is unlikely.

The explosion in population and medical knowledge and the increased desire for health care for all citizens have been responsible for profound changes in the practice of medicine the world over.

In most other countries, medicine has allegedly failed to adapt to changing conditions. When government and society demanded a new approach to better health, organized medicine did not respond adequately; therefore, socialization now prevails. A workable arrangement between government and society on the one hand, and medicine on the other, to answer social demands has yet to be effectively developed anywhere in the world. Here in the United States, we still have time to effect this development. How much time remains, and how much we can do in this short span, is the crucial question.

The inroads of government into health in the United States, the last country in which personal medicine is practiced, can be measured by the fact that 6 per cent of our gross national product was spent on health last year. Twelve billion dollars of this money is derived from taxes, to which physicians, I believe, contribute their share. For some bizarre reason, physicians have viewed money that has gone to Washington as untouchable. It is incredible that billions of public dollars are spent on health and yet the physician many times is reluctant to lend his wisdom and advice to the question of how this money should be spent.

An enlightened public, on the other hand, is demanding a close scrutiny of the manner in which medicine is practiced. The doctor is no longer viewed as a free agent, responsible only to his patient. Rather, he is viewed as a national resource, responsible to the public to *deliver* what is considered a *right* for all citizens—*better health*. There is a demand for comprehensive, long-range medical care, as well as long-range health planning. Serious questions arise, such as: How many doctors will be needed a decade hence? What kind of doctors should these be? How should quality medical service be delivered at the lowest possible cost? Many, inside and outside of government, are seeking answers to these questions. And, so must we.

At present, medicine is only partially adapting to its evolved role. Many groups in government, education, labor and industry, in a position of power in the health field, are not convinced that effective delivery of health care can be planned or accomplished except by government. Yet, if voluntary medicine can lead in planning and in meeting the demands of both the public and government, there should be no need for further government regulation.

In some areas voluntary medicine is partially structured to meet these needs. However, in many states and on a national level, it not only has failed to adapt, but has resisted change in the face of public demand. Organized medicine has temporarily lost some of its force and leadership, and today there is no clearly defined leadership in medical affairs. Leadership formerly provided by the AMA has been dispersed among the Association of American Medical Colleges, American Hospital Association, and individual hospitals, universities and institutions. This dispersal of authority can take away the physician's voice in the shaping of his own profession.

Institutions, rather than voluntary organizations, by controlling hospital privileges, can control the practice of medicine in most urban communities. It becomes clear, therefore, that voluntary medicine will have a role only proportionate to its ability to perceive needed changes and its capacity to spearhead these changes.

How can voluntary medicine plan for the new social order? Social planners point out that planning should be done and decisions made where the problems are—as close to the people as possible. In prac-

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President's Address delivered September 13, 1967, Olympic Hotel, Seattle, during WSMA Annual Meeting.

tical applications, local voluntary planning is most effective in solving genuine problems.

Health care must be ultimately delivered from one physician to one patient; therefore, the physician must insure that planning on a national level does not become divorced from those who carry out the delivery and those who receive medical service.

What then is the place of voluntary medicine in the new order of things? The answer to the question of what is good about personal medicine for the individual patient must be given to those who challenge private medicine and clamor for socialization. The personal obligation for service to the patient is always clearer where the physician contracts only with the patient for service to him and compensation from him. Under medicine dominated by government, the obligation is divided between the government and the patient.

Local voluntary planning and action to preserve personal service is a basic reason for continuing voluntarism. This is easy to say, but can medicine meet this challenge? I believe it can.

six point program

Physicians must *first* come to understand the new planning process. We must master this process and put it into effect. *Secondly*, with improved planning, the physician can develop realistic programs to answer social needs. And with realistic programs, the *third* step is to convince the community leaders of the value of voluntary medicine and involve the community in the programs. With valid, constructive programs, medicine can implement step *four* and set forth to convince representatives in state and national legislatures of their value and obtain support. Following Congressional approval of constructive programs, the *fifth* step is to have the physician become active on councils guiding the implementation. The *sixth* and final step is for the physician to let the government and the public know that the job *is* being done through voluntary effort in the best possible manner. This six point program sounds like a simplified answer to an extremely complex problem, but it can serve as a guide.

Can the voluntary segment do it? The Washington State Medical Association has come closer to answering this question, in my humble opinion, than most other organizations. The activities of the Association present clear evidence of the manner in which cooperation between private medicine, the university, state and national government can answer the needs for social reform.

Recognition of such need occurred some 30 years ago in this state with the development of physician-sponsored bureaus to assist in providing medical care for those with low incomes. This was a milestone in extending medical care. Thus, relative to the first consideration in the above program, voluntary planning has been proceeding for a long time in the state of Washington.

To assist in the planning process, WSMA has been awarded the first planning grant given to any state medical association from the Public Health Service —to fund seminars to assist physicians in planning.

Relative to the second point, realistic programs have been developed and several are in preparation. Our newly formed foundation places the Association in a position to develop and fund new programs which could not be done by the Association alone. In cooperation with the regional medical program and the University, the foundation has applied for, and has received, funds to implement one of the first comprehensive surveys of physician needs in the field of continuing medical education. From this survey, we intend to bring physicians and patients in this region the latest in technology on a continuing basis. In addition, programs in school health, mental health, water and air pollution and many others have involved the physician with community leaders, convincing many of them of our sincerity and the value of our programs.

Relative to the fourth consideration, that of legislative liaison, by convincing our representatives of the worth of our activities, dialogue between physician and local, state and national government has become a tradition of the WSMA. For several years, there has been a continual interchange with government at all levels—often with disagreement, but generally resulting in solutions to mutual problems. At present, our advisory committees to the state departments dealing with health are being consulted frequently and are being called upon to determine what constitutes necessary and optimal health care. For the first time in the history of this state, we have been asked by one department to sit with them to construct a realistic budget to present to the Legislature for adequate coverage of physician services to welfare patients.

At the national level, our newly developed legislative advisory committees have functioned surprisingly well. We have kept our Congressmen and Senators informed on health legislation in their state, while they, in turn, have asked our opinion on national legislation before it has become law.

Medical judgments from the grass roots level are being sought and incorporated into national legislation. This is superior to passage of health legislation without the advice and council of physicians. We have convinced our representatives of our sincerity to the point that they look to us for innovations.

In reference to the fifth point, representation on decision making bodies, our continued representation on the Advisory Committee of the Regional Medical Program, insures our voice in the implementation of that large program. We are, in addition, assured of representation on the council guiding the new legislation embodying comprehensive health planning recently passed by Congress. In preparation for our role in comprehensive health planning, the seminars, to be held under our grant, should give us the expertise necessary to be effective on this and other councils. Representation on advisory councils to the Governor and state health departments have helped shape legislation. Our close work with state legislators resulted in our being consulted on most health matters coming before the 40th Session of the Washington State Legislature.

Despite these vigorous efforts, the public is demanding more of the private sector and threatens to look further to government. To meet this nearly insatiable expectation, the Association is increasing its activities in all six of the areas outlined. In order to become stronger in the new social order, it may be necessary to alter the very structure of our organization so that it can react with more flexibility to change. The rapid growth of the paramedical area requires the physician to view his role in a new light. The concept of the health team caring for the whole patient rather than the physician practicing alone, is gaining acceptance. To relieve the physican shortage, the transfer of some of the physician's duties to paramedical personnel to free the physician for decision making, medical judgment and long-range planning appears essential. No longer is it possible for the individual to bring all of the vast new technology to his patient. Reliance will be placed more and more on many experts to accomplish this task. The health-team concept is with us to stay, and the only logical individual to lead this team is the physician.

With effective voluntary organizations, there is no reason why he should not chart the course of things to come. More active participation through voluntary organizations is essential to assist in the now accepted partnership between voluntarism, universities and government for better delivery of health services.

Comparing our participation in our voluntary organizations with that of labor, management and the administrative fields, we are weak indeed. Laborers, with the lowest incomes, contribute more to their organizations than physicians. For all their faults, voluntary medical organizations remain the only voice speaking out for the physician and high quality personal care for patients—the only overall organization through which he can remain effective in the new social order. It is imperative, therefore, that he contribute his support in time, money and effort sufficiently to do the job.

The voluntary organizations in turn must pool their resources and solve the difference that exist between specialties and join forces with other organizations, including the cancer and heart associations. Together these organizations represent a potent force for social betterment.

We should be proud that the WSMA is ahead of most states in assisting the physician in his task of providing high quality personal care to the public. It is a tribute to an active, alert membership and to one of the most effective executive staffs available.

We need now, more than ever, continued, enlightened support to sustain leadership in the struggle to demonstrate that voluntary medicine not only can survive but can formulate and produce better health care for all citizens, than any alternate system. ■

Lucius Hill M.D.

A Building Block approach to treating hypertension

ABBOTT

With these three therapeutic building blocks you can create a once-a-day regimen to fit almost any degree of hypertension. See the following pages for details . . .

Consider starting your hypertensives on this basic thiazide

ABBOTT

A single daily dose of Enduron provides sodium excretion around the clock

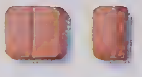
Enduron is a true 24-hour single-dose thiazide. Its sodium excretion is not squeezed into an abrupt peak during the first several hours. It is well-sustained in a plateau-like effect—with little reduction for the first 12 hours, and decline thereafter only gradual.

Potassium loss, by contrast, is low. It reaches an early minor peak, then subsides rapidly. Moreover, since dosage is but once a day, there is but one daily peak of potassium loss. As with all thiazides, however, dietary potassium supplementation should also be considered, especially in long or intensive therapy.

Use Enduron as an ideal starting therapy in mild hypertension. Use it too, as a basic therapeutic building block with which other agents can be joined, for managing your more resistant hypertensives.

Once a day, every day

ENDURON®
METHYCLOTHIAZIDE

DAILY DOSAGE RANGE	Minimum	Usual	Intermediate	Maximum
				
	2.5 mg. tablet	5 mg. tablet	7.5 mg.	10 mg.

See Brief Summary on final page of advertisement.

To build added response, shift to Enduronyl

ABBOTT

The deserpidine component adds enhanced antihypertensive activity

The rauwolfia component of Enduronyl is deserpidine (Harmonyl®), a purified crystalline alkaloid supplied only by Abbott. It augments Enduron with its own antihypertensive and tranquilizing action.

Thus the combined clinical effect of these two therapeutic building blocks in Enduronyl is greater than can ordinarily be achieved with either alone.

To add flexibility, Enduronyl comes in two strengths: regular and Forte. Both provide 5 mg. of Enduron. The variation is where most helpful: in the deserpidine. The tablets are scored, and give a surprisingly wide and economical choice of once-a-day doses (see below).

Choose Enduronyl for your patients in the broad range of mild to moderate hypertension. Patient acceptance is excellent!

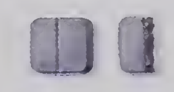
Once a day, every day

ENDURONYL®

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.25 MG.

ENDURONYL FORTE

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.5 MG.

	Minimum	Usual	Intermediate	Maximum
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.125 mg. deserpidine	 5 mg. methyclothiazide 0.25 mg. deserpidine	 7.5 mg. methyclothiazide 0.375 mg. deserpidine	 10 mg. methyclothiazide 0.5 mg. deserpidine
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.25 mg. deserpidine	 5 mg. methyclothiazide 0.5 mg. deserpidine	 7.5 mg. methyclothiazide 0.75 mg. deserpidine	 10 mg. methyclothiazide 1 mg. deserpidine

See Brief Summary on final page of advertisement.

707075-R

Eutonyl affords a different kind of basic therapy for moderate to severe cases

ABBOTT

Effect tied to reduced peripheral vascular resistance; no central depressant action

Eutonyl is a unique nonhydrazine agent. It is reported to act by reducing peripheral vascular resistance.[1,2]

In clinical trials, significant reductions in mean blood pressure were seen in 84% of patients studied—all were moderate to severe cases. Eutonyl lowers diastolic in proportion to systolic, and in about half of the cases studied, reductions in the sitting and recumbent positions were nearly as great as in the standing position.

Most important: There is no central depressant action. In fact, some patients reported an *increased* sense of well being.

Here, then, is a highly effective *basic treatment* for moderate to severe cases—and one that will not hamper your patient with lethargy or drowsiness while on treatment.

Once a day, every day

EUTONYL®
PARGYLINE HYDROCHLORIDE

DAILY DOSAGE RANGE	Minimum	Usual starting	Intermediate	Maximum
	10 mg. tablet	25 mg. tablet	50 mg. tablet or as needed	200 mg.

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1. *Brest, A. N., et al., Cardiac and Renal Hemodynamic Response to Pargyline, Ann. N. Y. Acad. Sci., 107-1016, 1963.*
2. *Winsor, T., Pargyline Hydrochloride, Hypertension, Urinary Tryptamine, and Vascular Reflexes, Geriatrics, 19:598, Aug., 1964.*

See Brief Summary on final page of advertisement.

Eutron adds thiazide for enhanced therapy with milder side effects

ABBOTT

Only a 7/4 mm. span between standing and recumbent pressures in clinical trials—reduced chance of orthostatic hypotension

The combining of Eutonyl and Enduron in Eutron permits a significantly greater antihypertensive effect than with either agent used alone. This in turn may allow therapeutic success with lesser dosage—and correspondingly milder side effects.

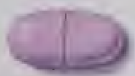
A significant finding in clinical trials was the drug's action in lowering blood pressure to *nearly equal levels in all body positions*. Total average spread between standing and recumbent readings (after treatment) was only 7/4 mm. Hg.

Thus, in your moderate to severe cases, Eutron affords a usually smooth course of therapy, often with reduced likelihood of orthostatic effects. (The usual precautions against rising suddenly, of course, will always apply.) And, because of the thiazide component, Eutron may be used in the presence of congestive heart failure.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 MG.
WITH METHYCLOTHIAZIDE 5 MG.

	Minimum	Usual starting	Intermediate	Maximum
DAILY DOSAGE RANGE	 12.5 mg. pargyline hydrochloride and 2.5 mg. methyclothiazide	 25 mg. pargyline hydrochloride and 5 mg. methyclothiazide	 37.5 mg. pargyline hydrochloride and 7.5 mg. methyclothiazide	 50 mg. pargyline hydrochloride and 10 mg. methyclothiazide

See Brief Summary on final page of advertisement.

TM—Trademark

707075-R

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg.

Indications: Enduron is used to control edema and mild to moderate hypertension; also used with other drugs for hypertension. Enduronyl is used in mild to moderately severe hypertension; when used with Enduronyl, more potent agents can be given at reduced dosage to minimize undesirable side effects.

Contraindications: Neither Enduron nor Enduronyl should be used in severe renal disease (except nephrosis) or shutdown; in severe hepatic disease or impending hepatic coma; in patients sensitive to thiazides. Hepatic coma has been reported as a result of hypokalemia in patients receiving thiazides.

Enduronyl is contraindicated in patients with severe mental depression and suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity reactions in patients with a history of allergy or asthma. If added potassium intake is indicated, dietary supplementation is recommended. Enteric-coated potassium tablets should be reserved for cautious use only when adequate dietary supplementation is not practical because those tablets may induce serious or fatal small bowel lesions consisting of stenosis with or without ulceration. These small bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs.

Precautions: Use thiazides with caution in severe renal dysfunction, impaired hepatic function, or progressive liver disease. In surgical patients, thiazides may reduce the response to vasopressors and increase the response to tubocurarine. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism have been reported in certain newborn infants). Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. Antihypertensive response may be enhanced following sympathectomy.

Use Enduronyl with caution in patients with a history of peptic ulcer, as rauwolfias may increase gastric secretion. Discontinue at the first sign of mental depression. Rauwolfia alkaloids may increase hypotensive effects of surgery or anesthesia, and should be discontinued two weeks prior. They also lower the convulsive threshold and shorten seizure latency. In epilepsy, dosage adjustment of anticonvulsant medication may be necessary. Alcohol, barbiturates, or narcotics may potentiate action of deserpidine.

Adverse Reactions: During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). All patients should be observed for signs of hyponatremia ("low-salt" syndrome). Reported thiazide reactions include: anorexia, nausea, vomiting, diarrhea, headache, skin rash, dizziness, paresthesia, weakness, photosensitivity, jaundice, and pancreatitis.

Reported rauwolfia reactions include: nasal stuffiness, nausea, weight gain, diarrhea, aggravation of peptic ulcer, epistaxis, skin eruption, and reduction of libido and potency. Excessive drowsiness, fatigue, weakness, and nightmares may signal early signs of mental depression.

EUTONYL® | EUTRON™

PARGYLINE HYDROCHLORIDE

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone. It is desirable to establish the dosage of Eutron by administering component drugs separately.

TM-Trademark.

Contraindications: Pheochromocytoma, advanced renal disease, increasing renal dysfunction, paranoid schizophrenia and hyperthyroidism. Hepatic coma has been reported as consequence of hypokalemia with thiazide therapy. Until further experience is gained not recommended for patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. 2 week interval should separate therapy and use of these agents.

Methyclothiazide is contraindicated in patients with known sensitivity to thiazides.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When indicated, alcohol, narcotics (meperidine should be avoided), antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers, or caffeine, may be used cautiously in reduced dosage. In emergency surgery ¼ to ⅕ the usual dose of narcotics, analgesics, and other premedications should be used avoiding parenteral administration where possible. Carefully adjust dose of anesthetics to response of patient. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or coronary artery disease should not increase physical activity with an improvement in well being. Pargyline may lower blood sugar.

Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions consisting of stenosis with or without ulceration. These small-bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs. These products contain no added potassium salts and if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical. In patients with a history of allergy or asthma the possibility of sensitivity reactions should be considered.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields and fundi. Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. In surgical patients thiazides may reduce response to vasopressors and increase response to tubocurarine.

Adverse Reactions: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extrapyramidal symptoms have been reported in a few patients with reduced cardiac reserve.

During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). Observe all patients for signs of hyponatremia ("low salt" syndrome).

Reported thiazide reactions also include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, and pancreatitis. Nocturia has been observed with the combination.

709075R

ABBOTT

X-Ray of the Month
On Page 937

Duodenal Atresia. Note the two spherical gas collections in the abdomen—the “double bubble” sign—produced by the dilated stomach and the dilated dudenal bulb. There is total absence of gas elsewhere in the intestinal tract. Complete obstruction, therefore, exists at the second portion of the duodenum. (The circular density projected over the lumbar spine represents the umbilical cord stump.)

Both extrinsic and intrinsic lesions may produce obstruction in this area.

Of the extrinsic causes, congenital peritoneal bands or “veils” may lead to obstruction in the newborn, but usually this becomes manifest later in life. The site of obstruction is more likely in the third portion of the duodenum, and it is often incomplete. Since these bands are frequently associated with gut malrotations, a barium enema examination may provide a helpful clue in revealing a colon malposition.

Annular pancreas produces a constriction of the duodenal lumen but this too is seldom associated with a total obstruction.

The findings as demonstrated in this patient, therefore, point toward an intrinsic lesion. The most likely etiology is congential stenosis or atresia which is produced by delay or arrest in development at some stage in the formation of the duodenum.

At surgery the duodenal and gastric dilatation was obvious with the distal bowel completely flat. A bypass anastomosis was performed. The obstruction was produced by an area of atresia in the second portion of the duodenum.

for the searing pain of “Shingles”...

PROTAMIDE®
(colloidal solution of denatured proteolytic enzyme)

Offers prompt pain relief

Relief of neuritic pain from *herpes zoster* (shingles) is prompt[1-3]—usually after the first few intramuscular[2] injections—particularly when therapy is administered early.[3,4] The duration of disability in many patients is often significantly shortened.[2] Postherpetic neuralgias—even in the elderly—rarely develop.[1,4] Complete pain relief is observed in most patients within 5 days.[2]

Administration in *herpes zoster:* one ampul (1.3 cc.) I.M. daily for 2 to 5 days. Caution: For intramuscular use only. Inadvertent I.V. administration may cause anaphylactoid reaction. Supplied: Boxes of 10 ampuls, 1.3 cc. each.

References:
1 Combes, F. C. and Canizares, O.: *New York State J. Med* 52:706-708 (Mar. 15) 1952.
2 Xander, G. W.: *Western Med.* 1:14 (Sept.) 1960.
3. Baker, A. G.: *Penna. Med. J.* 63:697-698 (May) 1960.
4 Lehrer, H. W., Lehrer, H. G., and Lehrer, D. R.: *Northwest Med.* 75:1249-1252 (Nov.) 1955.

Sherman Laboratories
Detroit, Michigan 48211

SPECIAL ARTICLE

Sterilization in Oregon

JOHN J. COUGHLIN, LL.B., Portland, Oregon

Sterilization in Oregon may be a compulsory sterilization after compliance with state statutes or voluntary sterilization at the request of the patient or other responsible individual.

compulsory sterilization

The 1967 Session of the Legislature adopted Senate Bill 344 which contains extensive provision amending the prior law regarding compulsory sterilization.

The bill changed the name of the state agency administering compulsory sterilization from the "State Board of Eugenics" to the "State Board of Social Protection." It also changed the composition of the Board and established the Board as a division within the State Board of Health.

Extensive provisions are made for hearings, appeals from orders of the Board, appointment of guardians of incompetents and attorneys representing the persons involved. However, since few physicians are involved in the procedure for compulsory sterilization, I shall not discuss the provisions of the bill authorizing compulsory sterilization in any great detail.

Senate Bill 344

Senate Bill 344 also contained a section authorizing sterilization outside of state institutions and outside of the statutes dealing with compulsory sterilization upon the request of the person involved. This provision of the statute reads as follows:

> Section 15. A person may be sterilized by appropriate means *upon his request* and upon the advice of a physician licensed by the State Board of Medical Examiners. Before performing any sterilization procedure, the physician shall *consult with two other licensed physicians* or with the sterilization committee, if any, of a licensed hospital. If they agree that *sterilization is not medically objectionable,* the sterilization procedure shall occur *in a licensed hospital.*" (Emphasis mine.)

Senate Bill 344 became law, September 13, 1967. Prior its enactment, there were no statutes in Oregon prohibiting voluntary sterilization or authorizing voluntary sterilization. The effect of this situation was that sterilization could be performed in Oregon upon appropriate consent. Liability of physicians for sterilization operations, if any, was based upon the usual grounds of malpractice.

Enactment of S.B. 344, including the above quoted Section 15, raises several problems:

> 2. Does Section 15 of S.B. 344, if constitu-
> 1. Is Section 15 of S.B. 344 unconstitutional?
> tional, provide an exclusive method of performing sterilization operations?

The reason for questioning constitutionality is that it is an amendment of a statute originally passed in the 1923 Session of the Legislature: Chapter 194, Oregon Laws 1923. The title provides that it is an act "for the sterilization of all feebleminded, insane, epileptics, habitual criminals, moral degenerates and sexual perverts who are a menace to society." The question of constitutionality would turn upon whether the subject matter of Section 15 is germaine to the same general subject embraced in the title to the 1923 law.

Assuming that it is constitutional, the next question is whether or not a sterilization operation performed without complying with Section 15 would place liability upon the physician performing the operation. For instance, if a sterilization operation were perfomed at the request of the patient's husband or wife and the patient is incompetent but the guardian of the patient approves the operation, would any liability accrue to the physician involved? Also, if the operation were performed at the patient's request and upon the advice of a physician licensed by the Board of Medical Examiners and the requisite consultation with two other physicians is obtained, but the sterilization procedure is carried out in the physician's office rather than in a licensed hospital, would any liability accrue to the physician performing the operation?

Because of the lack of authoritative judicial expression on the legal problems involved, it is *strongly suggested that sterilization operations by physicians be carried out strictly in accordance with the provision of Section 15 of S.B. 344, the essential factors* of which are as follows:

> 1. The patient should request the sterilization, and appropriate consents, as more fully set forth in later provisions of this article, all in writing.
> 2. The physician involved or another physician licensed by the State Board of Medical

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Mr. Coughlin is legal counsel for Oregon Medical Association and Multnomah County Medical Society.

Examiners should advise as to the appropriateness of the operation.

3. The physician involved should consult with two other physicians licensed by the State Board of Medical Examiners or the Sterilization Committee, if any, of a licensed hospital.

4. The consulting physicians should agree in writing that sterilization is not medically objectionable.

5. The sterilization procedure should occur in a licensed hospital.

In Making this recommendation,, I want to emphasize:

a. Said Section 15 contains no penalty clause in itself.

b. Section 15 does not provide directly that the procedure provided for therein is the exclusive method to be followed in sterilization operations.

c. Liability of a physician probably would not directly follow, simply because the statute was not literally complied with, but any untoward consequence of an operation performed without compliance with the statute might be grounds for establishing liability. For instance, if the operation were performed in a doctor's office, and some complications arose that could have been prevented or corrected in a hospital with better facilities than those in the doctor's office, grounds for liability might arise.

Although there is no provision in Section 15 of Senate Bill 344 regarding the necessity for the presence of medical reasons for sterilization, as distinguished from economic or other reasons, some cases in states other than Oregon have discussed the necessity for such medical reasons. The presence of medical reasons would, of course, strengthen the position of a physician if the performance of the sterilization procedure should be questioned in the future.

possible grounds of liability of physicians in sterilization operations

The general grounds of liability of physicians performing sterilization operations are the same as face physicans in the performance of other operations, except that some Courts have placed more stress upon the doctrines of warranty of the physician and guaranty of results in sterilization operations. These general grounds are as follows:

1. *Negligent performance of the operation.* Since physicians are generally aware of this ground of liability, I shall not further discuss this ground.

2. *Assault and battery, being an unauthorized invasion of the body of the patient.* Again, this ground of liability is generally known by physicians. A form of consent is set forth in a later provision of this article, which should be obtained from the patient in writing, and from the patient's guardian if the patient is an incompetent or a minor. Since the sterilization operation has effect upon the spouse of the patient, it is very desirable, but probably not legally necessary, to obtain a specific written formance of the operation.

3. *Deceit.* This possible ground of liability would be based upon a claim by the patient or by the patient's spouse that the physican represented that the operation would prevent a male patient from procreating children, or the female patient from bearing children, but that the operation did not accomplish the purposes desired by the patient. Courts will normally require that the patient allege and prove that not only was the doctor's statement false, but it had been made fraudulently by the physician, before establishing the ground of deceit. I have been informed that a sterilization operation in a male is sometimes ineffective for medical or consent from the patient's spouse to the peranatomical reasons, and, if so, this should be explained to the patient.

4. *Breach of Warranty.* This ground of possible liability is similar to the ground of deceit and is based upon allegations that the physician made an express warranty or guaranty of the operation's success and that the operation, in fact, was unsuccessful. Again, the form of consent suggested here will be helpful in such a situation. A patient may recover under this theory even though there is no fraud, if the patient justifiably relies on the representation.

5. *Guaranty.* This is another form of the same general type of liability discussed under deceit and breach of warranty.

6. *Lack of informed consent.* Lack of informed consent is a relatively new approach by courts to establish liability of physicians. I know of no case which has raised the ground of lack of informed consent in a sterilization operation, but the possibility of such a ground of liability may be particularly present in sterilization operations. Generally, the lack of informed consent ground of liability arises where the physician has the consent of the patient to perform a certain procedure but the patient claims that the physician did not inform him regarding possible dangerous results of the procedures, and that he would not have given consent if he had been informed of such possible dangerous reults. To guard against this possible claim of liability, the physician, of course, should explain to the patient possible dangerous results of the operation.

consent

As previously indicated, the consent to the performance of the operation should be written, and signed by the patient and also signed by the spouse of the patient.

In the case of an incompetent or a minor, the form of consent should be signed by the guardian of the incompetent or of the minor. Normally, in the case of a minor living at home, the consent of the father or mother of the minor would be the consent of the guardian, since those persons are the natural guardians of the minor. In the case of a minor, the consent should be signed by the minor, and also the minor's guardian.

As indicated earlier, Section 15 of S.B. 344 raised

continued on page 973

Against these three major pathogens...

Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemolytic Streptococci

V-Cillin K® provides dependable oral antibacterial therapy

because it combines a high degree of activity...

V-Cillin K has been shown to be effective in the treatment of streptococcus and pneumococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy in patients with a history of rheumatic fever or congenital heart disease.

with high blood levels, even when taken with food

V-Cillin K is stable in acid and immediately soluble. High serum levels, therefore, are reached rapidly. Because it is acid stable, V-Cillin K is well absorbed even when taken close to mealtime. These desirable properties help make V-Cillin K a dependable penicillin for oral use.

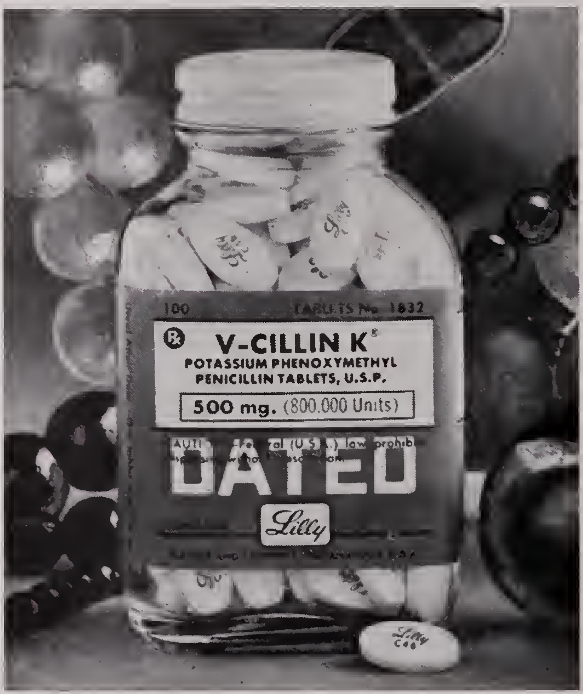
V-Cillin K® 701449

Potassium Phenoxymethyl Penicillin

Now available: V-Cillin K®, Pediatric, for Oral Solution, 250 mg. (400,000 units) per 5 cc. of solution.

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

701449

Belap® relaxes visceral spasm.
BRAND OF PHENOBARBITAL AND BELLADONNA EXTRACT
Belap decreases hyperacidity.
Belap reduces nervous tension.
Belap soothes the spastic gut.
What more could you ask of one little tablet?

Hypersecretion and smooth muscle spasm are the two components of visceral spasm. Belap treats both simultaneously with its combination of natural belladonna alkaloids for prompt anticholinergic action. Phenobarbital provides smooth central sedation. Belap safely and reliably relieves the pain and distress of visceral spasm in peptic ulcer, abdominal pain and cramps, pylorospasm, nausea of pregnancy, nervous indigestion and motion sickness.

Each Belap Tablet contains:

	No. 0	No. 1	No. 2
Phenobarbital (Warning, may be habit forming)	8 mg.	15 mg.	30 mg.
Belladonna Extract	8 mg.	8 mg.	8 mg.

One tablet three times daily. Available in bottles of 100 and 1000.

Use Belap Ty-Med tablets whenever timed-release medication for smooth, prolonged anticholinergic and sedative action is desired.

Belap Ty-Med* (Modified formula). Each tablet contains: Amobarbital (Warning, may be habit forming) 50 mg./Homatropine methylbromide 7.5 mg.

*Lemmon brand of timed-release medication.

One Ty-Med tablet morning and night. Available in bottles of 30 and 100 tablets. Observe the usual precautions for barbiturates and parasympatholytic compounds.

Caution: Federal law prohibits dispensing without prescription.

HAACK LABORATORIES, INCORPORATED
DIVISION OF LEMMON PHARMACAL COMPANY
PORTLAND, OREGON 97208

From a continuing study on nasal congestion . . .

timed to work while your patient does

A study being conducted by the Department of Otolaryngology, Greater Baltimore Medical Center is stockpiling evidence that points to the fast action and prolonged relief effected by Triaminic in the treatment of nasal congestion.

Begun in March 1966, the study to date has encompassed 85 patients with common nasal disorders—and measured their response to recommended doses of Triaminic tablets.

Timed to release its oral nasal decongestant and two antihistamines within 8 hours, Triaminic was found to effect partial or complete relief in better than 82% of the subjects treated. Clearing nasal obstruction. Reducing turbinate swelling. Making breathing easier.

It's a comforting thing to know that Triaminic *really* works.

Triaminic® *timed-release tablets*

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride .... 50mg. Pyrilamine maleate .... 25mg. Pheniramine maleate .... 25mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets.

Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES • *a division of The Wander Company* • **LINCOLN, NEBRASKA 68501**

continued from page 967

a problem in that it states the serilization may be made upon the *patient's* request, and there is no provision for the request of a guardian. However, it is probable that the statute would be interpreted as permitting the request of a guardian of a patient in the case of an incompetent or a minor. In the case of a minor, however, the request should be made not only by the patient but by the minor's guardian, and, desirably, by the spouse of the patient if the patient is married.

form of consent

A suggested form of consent to a sterilization operation is shown here. Attorneys are normally chary of recommending the use of forms, just as physicians are reluctant to advise any general procedure to be adopted by all persons. However, the suggested form will at least serve as a start for a written consent. If the physician has any question about the form of consent in any case, he should consult his own attorney.

Again, this consent form should be signed by the patient and by the husband or wife of the patient. In the event that the patient is under some disability, such as below the age of consent, insane or incompetent, the consent should be signed not only by the patient but by the patient's parent or legal guardian as the circumstances indicate.

The signatures of the persons signing the consent should be witnessed by a disinterested person. ■

621 S.W. Alder (97205)

FORM OF CONSENT

I/we hereby request Dr.. and Dr.. ....,
or any physician and surgeon designated by said Dr.. . .... . to perform a sterilization operation upon.................. . .... . for reasons of medical importance.

In consideration of performance of such operation at my/our request, I/we hereby release such physicians and each of them from any claim, liability or demand for or on account of such operation or procedures in connection therewith and any and all results or consequences that may occur from such operations or procedures.

I/we hereby state that no promise or representation of any result has been made to me/us from such operation, but, I/we thoroughly understand that sterilization of .... may result from such operation.

Dated this ....day of.............................. , 1967.

Signature witnessed by:

....

Signature witnessed by:

....

Spouse

It is our opinion that sterilization of the above named ....
is not medically objectionable.

....M.D.

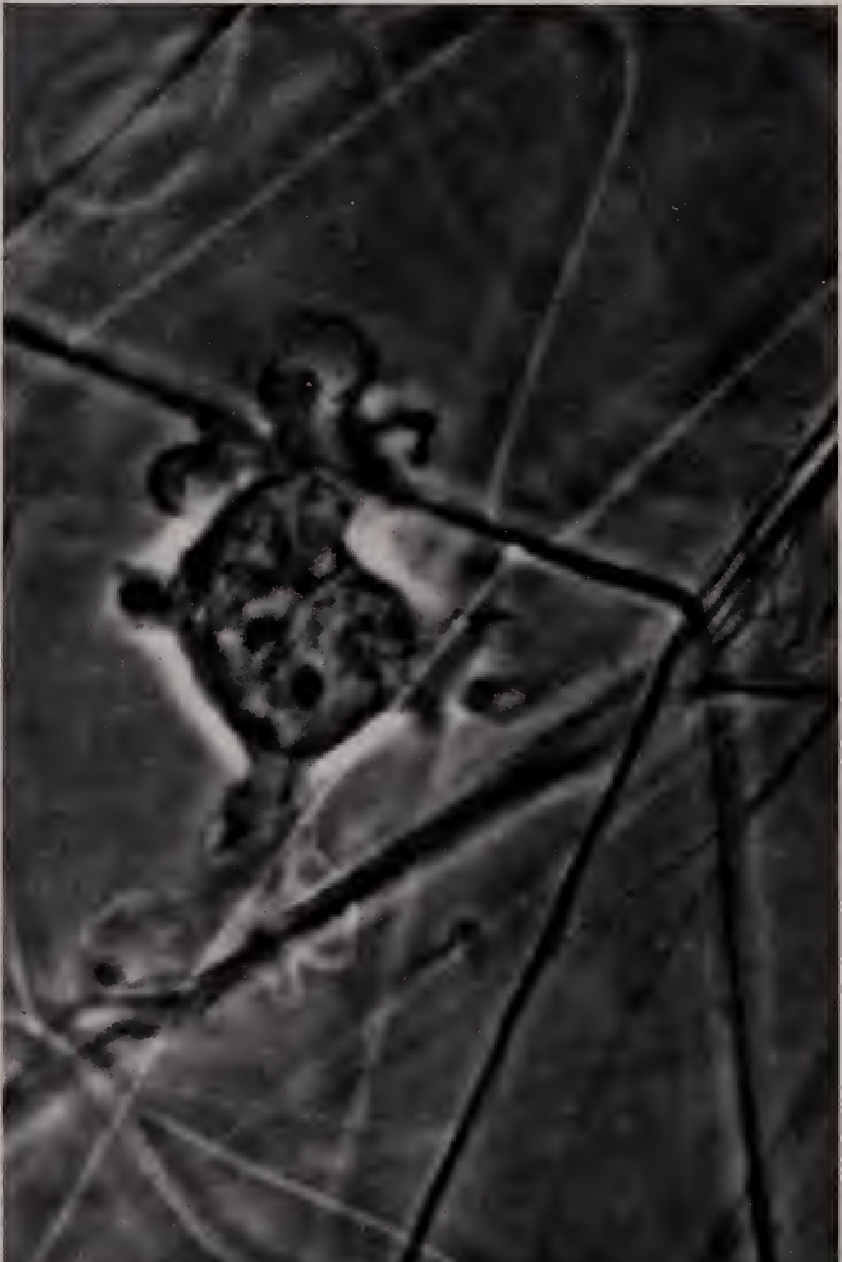
....M.D.

INFLAMMATION:
A cellular fight for life

A SYNTEX REPORT based on recently developed hypotheses about topical corticosteroids, including the cellular theories of inflammation by Thomas F. Dougherty, Ph.D., University of Utah.

You are looking at a fibroblast fighting for life. This cell—one of the most common found in connective tissue—has literally been poisoned by cytotoxins released from other cells that have ruptured. Soon, if the abnormal activity of this fibroblast does not cease, it, too, will rupture and die—one more casualty in the inflammatory wave of destruction precipitated by injury.

Until a short time ago no one had ever witnessed such a scene at the cellular level. Now, through advanced cinemicrographic techniques, it is possible to view and photograph the inflammatory process as produced experimentally in living animal tissue. This method permits new insight into the mechanism of inflammation and the role of corticosteroids in therapeutic management. Equally important, these techniques shed new light on factors that may make one corticosteroid more effective than another—factors that can be correlated with other chemical, biologic, and clinical parameters.

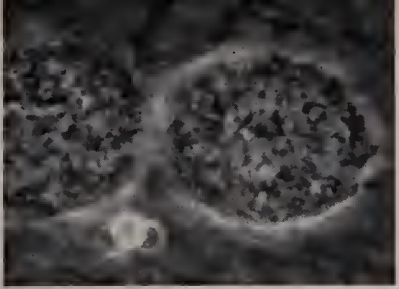


Visual evidence of how corticosteroids influence the inflammatory reaction

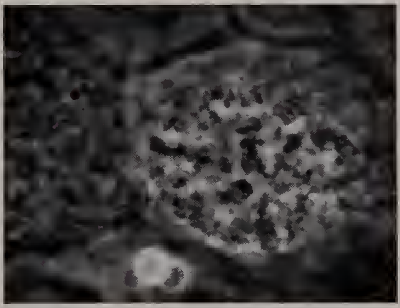
Working with phase-contrast cinemicrography on living animal tissue, Doctors Thomas F. Dougherty and David Berliner of the University of Utah College of Medicine have actually filmed cellular events that occur during the inflammatory reaction. This remarkable study* and additional work by these investigators, as well as by others, have established a new theoretical biologic basis for the antiinflammatory effect of the corticosteroids. (It must be noted that other theories, such as the lysosome or so-called "suicide bag" theory, have been postulated, although it is quite likely that there are more similarities than differences among the various theoretical models.)

The inflammatory wave of destruction

In this investigation an injurious injection of gelatin is used to set off an inflammatory reaction in living mouse tissue. What follows is a wave of destructive cellular activity that comprises the inflammatory response to injury. Mast cells (which contain heparin, serotonin and histamine) take up water, swell and rupture, releasing their contents, which are toxic outside the mast cell wall. These toxins, in turn, cause disintegration of other cells (such as fibroblasts) and the release of additional toxic material. Capillaries, too, take up water and leak unformed blood elements, causing edema. And polymorphonuclears, lymphocytes and perithelial cells invade the inflamed site. As a result of all these changes, the cellular environment reaches a state of turmoil.



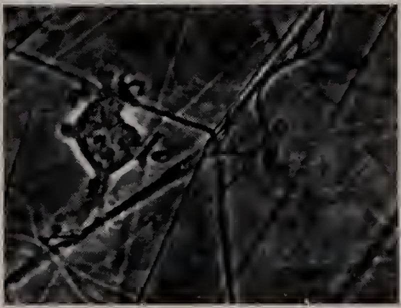
Phase-contrast microscopy showing mast cell before injury.



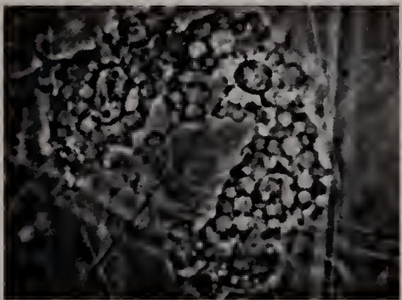
Mast cell (after injury) has broken up and released cytotoxins.

How corticosteroids change the picture

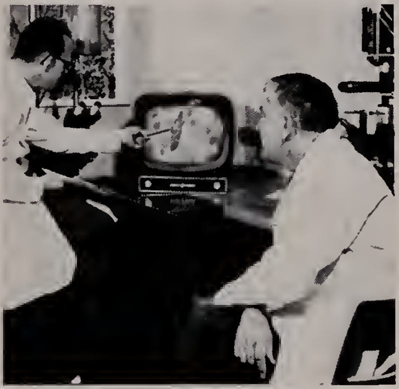
Corticosteroids appear to virtually stop the abnormal cellular activity that constitutes the inflammatory reaction. This permits the body's natural resources to clear up the inflamed area and repair the damaged tissue. This interpretation is supported by the fact that when the injurious gelatin solution is injected simultaneously with a corticosteroid – Synalar (fluocinolone acetonide) – the inflammatory pattern simply does not develop.



Fibroblast in high state of activity, much distorted.



Mast cells showing effects of corticosteroid action: cells are normal in size, shape and activity.



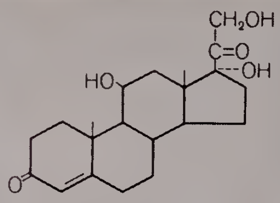
In summarizing his study Doctor Dougherty states: "...we also feel this work may explain why one corticosteroid helps a patient more rapidly and effectively than another. If it does, it is because one corticosteroid is the fastest, most effective inhibitor of the series of inflammatory events at the tissue level."

**A New View of Corticosteroid Action in Inflammatory Dermatoses,* a film based on this study, is now available from your Syntex representative.

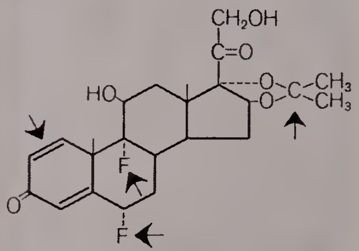
See last page for contraindications, precautions, side effects and dosage.

How advances in chemical design have achieved greater steroid potency

The chemical modification of corticosteroid molecules from the advent of hydrocortisone to the development of Synalar (fluocinolone acetonide) is a prime example of how biochemists can "design" to increase therapeutic activity and minimize undesirable side actions. Below, for example, we see the important changes that were made in reference to the hydrocortisone molecule to produce fluocinolone acetonide, one of the most active of all topical corticosteroids. As a result, a 0.01% preparation of Synalar (fluocinolone acetonide) has been reported to do the work of a 1% hydrocortisone product containing 100 times more cortiscosteroid. And it can often do it more effectively.



Hydrocortisone

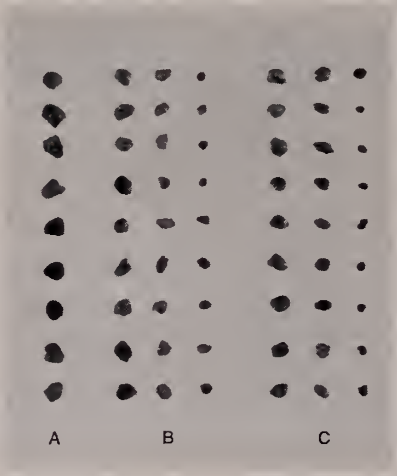


Fluocinolone Acetonide (Synalar)

- ☐ *a double bond between carbons 1 and 2*
- ☐ *fluorine substitutions at both the 6-α, and the 9-α positions*
- ☐ *the addition of the acetonide at the 16-α, 17-α positions, thus providing one of the most potent topical corticosteroids available.*

How bioassay tests are used to "predict" therapeutic potential

Biologic assays are another tool used by researchers to help establish the relative activity of corticosteroids. To date no single method of assaying corticosteroid activity has emerged as the ideal "yardstick" for predicting therapeutic potential. Taken together, however, these methods have proved useful. When such tests are run on various corticosteroids, a definite order of corticosteroid activity becomes evident. Compounds with the highest order of activity may be expected to merit clinical trial to establish their high therapeutic potential. When assayed by these methods, fluocinolone acetonide (Synalar) emerges as one of the most active topical corticosteroids, milligram for milligram, available for clinical application today.



THE THYMUS INVOLUTION ASSAY[1-4] is run on adrenalectomized rats. The sizes of the glands are measured, and the degree of involution caused by the steroid is determined as an indication of its potency. In the above photo, the comparative involution of thymus glands achieved with hydrocortisone and Synalar (fluocinolone acetonide) is shown. Untreated controls (A) show normal size. Group B – injected with 1, 2 and 4 mg. of hydrocortisone – show progressively smaller thymuses as does Group C – injected with fluocinolone acetonide – but with only 1/500th the dose of hydrocortisone.

THE ANTIGRANULOMA ASSAY[1-4] also utilizes adrenalectomized rats. Granulomas are induced by subcutaneous implantation of cotton pellets on either side of the thorax. The degree of granuloma inhibition achieved by a steroid reflects its potency. The above photo shows the inhibition of granuloma formation achieved with hydrocortisone and Synalar (fluocinolone acetonide). Untreated controls (A) show large, red granulomas adhering to the pellets. Group B, receiving hydrocortisone and Group C, receiving fluocinolone acetonide, show little, if any, granuloma formation. Fluocinolone acetonide produced the same effect as hydrocortisone with only 1/500th the dose. This assay, as well as the thymus involution assay, measures systemic rather than topical corticosteroid activity. Nevertheless, results by these methods correlate well with other assays and with the milligram potencies of topical steroids in current clinical use.

Worldwide clinical experience confirms the predictable therapeutic potential of Synalar

It is particularly gratifying that the promise of the advanced chemical design and high order of bioassay activity of Synalar (fluocinolone acetonide) has been confirmed by widespread therapeutic application. Indeed, the impressive clinical response rate of Synalar has been documented in no fewer than 232 papers from 22 countries.

Representative Clinical Results with Synalar*

Efficacy Documented in over 4,000 Patients

Condition	Number of Publications	Number of Patients	Significant Improvement†
Contact Dermatitis	27	750	713
Eczematous Dermatitis	21	472	409
Seborrheic Dermatitis	18	442	426
Atopic Dermatitis	24	460	426
Psoriasis	36	1,699	1,510
Neurodermatitis	18	351	324
Total	144	4,174	3,808

*Complete bibliography on request.

†Expressed by the authors as excellent, very good, good, complete remission of inflammation, etc.

Prescribing Information

For initiation of therapy: Cream 0.025%, 5 and 15 Gm. tubes, 425 Gm. jars; *for emollient effect:* Ointment 0.025%, 15 Gm. tubes; *for maintenance therapy:* Cream 0.01%, 15 and 45 Gm. tubes, 120 Gm. jars; *for intertriginous or hairy sites:* Solution 0.01%, 20 cc. and 60 cc. plastic squeeze bottles; *for infected inflammatory dermatoses:* Neo-Synalar® Cream (0.025% fluocinolone acetonide, neomycin sulfate, equivalent to 0.35% neomycin base), 5 and 15 Gm. tubes. Contraindications: Tuberculous, fungal, and most viral lesions of the skin, (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. Precautions: Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. Prolonged use of any antibiotic may result in overgrowth of nonsusceptible organisms; if this occurs, appropriate therapy should be instituted. When severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. Side Effects: Side effects are not ordinarily encountered with topically applied corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. The neomycin in Neo-Synalar Cream rarely produces allergic reactions.

References: 1. Lerner, L. J., Bianchi, A., Turkheimer, A. R., Singer, F. M., and Borman, A.: Anti-inflammatory steroids: potency, duration and modification of activities. Ann NY Acad Sci 116:1071 (Aug. 27) 1964. 2. Idem: Comparison of anti-granuloma, thymolytic and glucocorticoid activities of anti-inflammatory steroids. Proc Soc Exp Biol Med 116:385 (June) 1964. 3. Ringler, A.: Activities of adrenocorticosteroids in experimental animals and man, in Dorfman, R. I.: Methods of hormone research, New York, Academic Press, 1964. vol. III. pp. 234-280. 4. Gubersky, V. R.: To be published.

fluocinolone acetonide—an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

For inflammatory
dermatoses...
by any measure
a topical corticosteroid
of choice

Synalar®
(fluocinolone acetonide)

Milligram for milligram
one of the most active topical
corticosteroids available

Rapid and predictable
in antiinflammatory and
antipruritic activity

Results often comparable to
those of systemic corticosteroids
with fewer hazards

GENERAL NEWS

Upper photo. Arthur Seaman, Chairman of the Editorial Advisory Board, presents a check and plaque to Dr. Woodson. In photo at the left are Dr. Seaman; Miss Donna Ailport, the University of Oregon Medical School; Dr. Woodson; Mr. Robert Forrest, who presented the Encyclopaedia for Encyclopaedia Britannica; and Mr. David Rose, Portland District Manager Encyclopaedia Britannica. In photo at the right, Mr. Forrest congratulates Dr. Woodson while Miss Ailport looks on.

Winner of the 1967 NORTHWEST MEDICINE Manuscript Contest was R. Donald Woodson, who completed his residency in cardiopulmonary surgery at the Medical School Hospital, University of Oregon Medical School in August this year. The award ceremony was held during the 93rd Annual Session of the Oregon Medical Association.

Dr. Woodson, now a member of the faculty of the University of Illinois College of Medicine, returned from Chicago to receive the award of a bronze plaque, a check for $200 and a 24-volume set of the Encyclopaedia Britannica. Title of his winning manuscript was Atrial Pacing in Cadiac Surgery. It will be published in an early issue of this journal.

Arthur J. Seaman, Chairman of the Editorial Advisory Board of NORTHWEST MEDICINE awarded the plaque and check after a brief explanation of the purposes and conduct of the contest, which is an annual feature of this journal's activity.

Mr. Robert Forrest, who has represented Encyclopaedia Britannica in arranging the cooperative plan that provided funds for the contest, presented the set.

Honorable Mention awards went to David M. Jaecks, King County Hospital, Seattle, for a paper on Treatment of Bromide Poisoning with Ethacrynic Acid, and to W. Glenn Friesen, Medical School Hospital, Portland, for a paper titled Right Atrial Electrocardiography. These papers will also be published.

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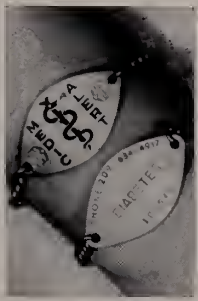
Consulting Psychiatrist
Physicians

LIFESAVING BRACELETS



More than 170,000 Americans have their lives protected by this bracelet. The nonprofit Medic Alert Foundation of Turlock, California, provides the signaling device for the one person in five who have a special or "hidden" medical problem. The American Medical Association estimates that forty million Americans should be wearing some sort of medical warning device. One side of the emblem has the words "Medic Alert" and the staff of Aesculapius to warn emergency personnel that a special medical problem exists. On the back is engraved the member's medical problem, such as "Diabetes," "Allergic to penicillin," et cetera. A 24-hour a day collect telephone number and an individual serial number also engraved on each emblem provides an additional link with life for the member. A one-time basic fee of $5.00 is charged.

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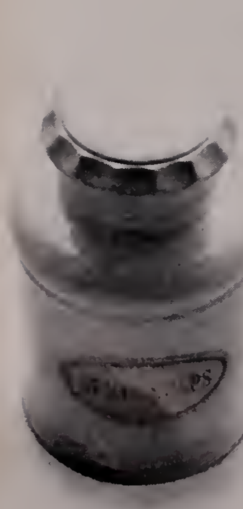

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Vitamin B_6 (Pyridoxine HCl)	2 mg
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Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
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Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

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Donnagel® -PG (Donnagel with paregoric equivalent).
Donnagel formula plus powdered opium, USP, 24.0 mg. (equivalent to paregoric 6 ml.) (warning: may be habit forming). Alcohol, 5%.

All the antidiarrheal benefits of paregoric without the unpleasant taste. Real banana flavor makes it acceptable, even to children.
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Glyceryl guaiacolate	100 mg.

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Each 5 cc. contains:

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Non-narcotic for 6-8 hour cough control
ROBITUSSIN®-DM
Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
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Alcohol, 1.4%

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Maybe your patients complain:
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Maybe you abandoned Hygroton chlorthalidone
because there wasn't a convenient half strength.

Indications: Hypertension and many types of edema involving retention of salt and water.

Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant patients, since the drug may cross the placental barrier and adverse reactions which may occur in the adult (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.

Precautions: Antihypertensive therapy with Hygroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Hygroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, hyperuricemia, headache, muscle cramps, orthostatic hypotension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

Average Dosage: One tablet with breakfast daily or every other day.

Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-D

For full details, please see the complete prescribing information.

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New Hygroton 50 mg. from Geigy

to go with the Hygroton 100 mg. you know

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CLASSIFIED ADVERTISEMENTS

All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than the 15th of the month preceding date of issue. Proof is not shown. Copy of ad as it appeared in the journal accompanies billing.

PRACTICE OPPORTUNITIES

OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

MEDICAL CENTER IN WESTERN WASH.—Has an opening for an internist and a dermatologist in a medical specialty group. City expanding rapidly with big industry and future outlook very promising. Climate and recreational facilities are excellent. Write Box 15-C Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

EXCELLENT GP OPPORTUNITY—To associate with 3 very busy practitioners. One with residency in surgery preferred. Financial arrangements open. Fully equipped office, good hospital facilities. Pacific Northwest, mouth of Columbia River, Astoria, Ore. Write Box 40-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

URGENT NEED FOR PHYSICIANS—Area North - Spokane has openings for 2 GP's, Board or Board eligible surgeons and internists. Competitive income with competent colleagues. Scenic surroundings and year-around recreations. Write Box 3-A Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

RADIOLOGIST—Certified in diagnosis and therapy or eligible, to join well established rediologist in beautiful Puget Sound country in Washington State. Live in vacation scenery and climate the year round. Country population 100,000. Hospital and office practice established for 21 years. Generous compensation to start, with full partnership planned after 10 to 12 months trial association. For details if seriously interested, write Box 35-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

WANTED—Physician, general practitioner, to practice in association with 5 other physicians. Attractive salary and retirement system with excellent sick and annual leave benefits. Well-staffed medical program. Office-type practice with varied pathology. Unfurnished housekeeping apt. available on station at reasonable rate. Near Medford, Ore., a growing medical center, in heart of beautiful Rogue River Valley with unlimited outdoor recreational opportunities. Non-discrimination in employment. Write to Director, VA Domiciliary, White City, Ore. 97501.

GENERAL PRACTICE OPENING—Fully equipped office available immediately. Will sell or lease with complete records. New 90-bed hospital nearby. Write H. A. Novak, M.D., 1412 N. 4th St., Coeur d'Alene, Idaho or call 208 MO 4-2315.

SEMI-RETIRED GP WANTS ASSOCIATE—Younger man to whom he can gradually turn over his practice. Suburban area of Tacoma, 1 block from hospital. Low overhead, good location in fine residential area. Phone collect or write L. E. Skinner, M.D., 5920 - 100th St., S.W., Tacoma, WA. 98499. JU 4-3338.

WELL EQUIPPED SOLO GP OFFICE—Including laboratory and x-ray. Arrange your own terms, quitting because of health. Northern Idaho, good hunting and fishing area. Write Box 6-A, Northwest Medicine, 500 Wall St., Seattle, WA. 93121.

OREGON COASTAL OPENINGS—For two general practitioners. New 41-bed district hospital serving about 6,000 residents. Three physicians at present. Office space and financing available. Richest per-capita city in Oregon. Abundance of recreation and mild climate. Contact Jack W. Cadwell, Administrator, New Lincoln Hospital, Toledo, Ore. 97391.

SITUATION WANTED

GP WITH 3 YRS EXPERIENCE WISHES TO RELOCATE—In Oregon or Washington. Married, 32 yrs. old, 4 children. Prefer town with less than 50,000 population. Interested in working with other gp's and have preference for general medicine and pediatrics. Write Box 5-A, Northwest Medicine, 500 Wall St., Seattle, WA. 98121.

CONTINUING EDUCATION COURSES

CURRENT CONCEPTS IN CARDIOLOGY—An intensive program with special emphasis on coronary disease, indication and management of valvular replacement, diagnosis and management of cardiac arrhythmias, vector-cardiography and applied cardiovascular physiology. This program is being offered by the Institute for Cardiovascular Diseases at Good Samaritan Hospital, 1033 East McDowell Rd., Phoenix, Ariz. 85002 on Jan. 10, 11, and 12, 1968. The meetings will be held at the Del Webb's House in Phoenix, Ariz. The program director is Alberto Benchimol, M.D., with guest faculty: William M. Chardack, M.D., E. Grey Dimond, M.D., Darrell D. Fanestil, M.D., Dean Franklin, George C. Griffith, M.D., Paul Huganholtz, M.D., Albert Kaffus, M.D., C. Walton Lillehei, M.D., Oscar Magidson, M.D., Alfred Pick, M.D., and Robert L. Van Citters, M.D. This is an official Postgraduate Course of the American College of Cardiology. For information about this program, write Mr. William B. Nelligan, Executive Director for the American College of Cardiology, 9650 Rockville Pike, Washington, D. C. 20015.

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CONVESTO—Write or call for free brochure that tells why Convesto is a better way to acquire apartment ownership for growth, profit and tax savings. 1411 Fourth Ave. Bldg., Rm. 701, Seattle, Wash. 98101, phone MA 4-2742. For Washington residents only.

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OFFICE SPACE

UNFINISHED OFFICE SPACE—In a clinic building now under construction across the street from Overlake Hospital, Bellevue, Wash. GL 4-8111.

MEDICAL SPACE BROADWAY & E. COLUMBIA—Fully serviced professional offices from $2.00 to $3.50 per sq. ft. annually. Mr. Jack Hayes, Henry Broderick, Inc., MA 2-4350, Seattle.

PHYSICIAN'S OFFICE—Located at 3601 So. McClellan Street. Reception room, private office with outside entrance, consultation room, 2 examining rooms, x-ray processing room and ample storage cupboards. Contact Henry Broderick, Mr. Marvin Bush, Second and Cherry, Seattle, Wash.

TWO UNFINISHED SUITES—Available in new medical building after January 1, 1968. Cross Roads area of Bellevue, Wash. Contact Clark Aaronson, M.D., 14810 Lake Hills, Blvd., Bellevue, WA. SH 6-6500.

MODERN CLINIC BUILDING—Lease. 2727 - 4th Avenue So. Seattle. Call Mr. Quinan, MA 2-4258.

LAKE HILLS MEDICAL-DENTAL CLINIC—Vacancy soon. Pediatrics, obstetrics or general medicine. Will realize immediate success as Clinic is located in heart of rapidly growing area of young families. 1012 W. Lake Sammamish N.E., Bellevue. Phone SH 7-3032.

VACANCY—Medical unit, approx. 825 sq. ft., available about Nov. 1, 1967, in Renton Highlands Medical-Dental Clinic (Shop. Center). Ideal for GP or specialist. Call AL 5-8678 or AL 5-3672, or write P. O. Box 626, Renton, WA. 98055.

MODERN OFFICE SUITES FOR LEASE—1214 Boylston, Medical Clinic located in prime medical district on First Hill. Elevator, parking and janitorial services provided. Will remodel to suit tenant's needs. For additional information: Northwest Properties, Inc., 1604 - Tower Bldg., Seattle. Mr. Ron Sleight, MA 2-1700.

REALESTATE

RANCH OF 115 ACRES—4 br. home, barn, corrals, etc. Excellent hunting and fishing with 5 acre pond and creek thru property. 9 mi. from Centralia, WA. $52,000 with $17,500 down.

85 ACRES—Old house and outbuildings. Creek. 40 acres cleared. 9 mi. from Chehalis, WA. $25,800.

INVESTMENT—70 acres, all irrigated, ½ mi. road frontage, ¼ mi. high bank river frontage. 3 mi. from Yelm, WA., $68,000, $20,000 down.

INVESTMENT—56 acres including over 1000 ft. river frontage and 1000 ft. paved county road. 2 older homes suitable for rentals or resale. 5 mi from Tumwater, WA., and near one of the proposed sites of the new 4-year-college. Asking $58,000. Terms Available.
American Realty Inc., Phone 352-5521, 8626 Martin Way, Olympia, WA. 98501.

WATERFRONT LOT - MERCER ISLAND — Complete unencumbered view of Mt. Rainier! Exceptional 94x165 ft. waterfront lot with western exposure. Gently sloping to a perfect building site. Lovely tall evergreen trees, no bank, would landscape magnificently. Realistically priced at $31,500. Denton-McCarthy, GL 4-9578, Bellevue, WA. 98004.

Meetings OF MEDICAL SOCIETIES

AMA Annual—San Francisco, June 16-20, 1968.

AMA Clinical—Houston, November 26-29, 1967; Miami Beach, 1968.

AMA Rural Health Conference, March 29-30, 1968, Seattle.

Oregon Medical Association—Oct. 1-4, 1968, Portland.

Washington State Medical Association—Sept. 22-25, 1968, Sept. 14-17, 1969, Seattle; Sept. 13-16, 1970, Spokane; Sept. 19-22, 1971, Seattle.

Idaho Medical Association—June 26-29, 1968, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society
Pres., John W. Whitelaw, Vancouver, B.C.
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy.—April 4-6, 1968, Hilton Hotel, Portland, Oregon.
Pres., Henry Zeldewitz, Vancouver, B.C.
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association
Pres., Serge Bryner, Palo Alto, Calif.

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

West Coast Allergy Society—Nov. 30-Dec. 2, 1967, Phoenix, Arizona
Pres., John S. O'Toole, Riverside, Calif.
Sec., Roy R. Matteri, Portland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.)
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
Sec., E. W. Landreth, Portland

Oregon Radiological Society — University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Frederick R. Asbury, Corvallis
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society — Quarterly Meetings, Congress Hotel, Portland
Pres., Donald Beardsley, Portland
Sec., C. A. Macfarlane, Portland

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland
Sec., David Sellers, Portland

Portland Academy of Pediatrics — 1st Monday
Pres., C. W. Van Rooy, Portland
Sec., Glenn Lembert, Portland

Portland Academy of Psychiatry — Fourth Tuesday except Dec., June, July, Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May)
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland

UOMS Alumni Association — Annual Meeting, April 24-26, 1968, Portland
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract. — 4th Mon., exc. June, July, Aug., Dec.
Pres., Donald McLaughlin, Seattle
Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto. — 3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Robert Laughlin, Seattle
Sec., D. F. Milam, Jr., Bellevue

Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Bernard Gomberg, Seattle
Sec., Joe J. Griffin, Lynnwood

Seattle Pediatric Society — 3rd Friday (Sept.-May), Arctic Club
Pres., James Tucker, Seattle
Sec., Janice Keller, Seattle

Seattle Surg. Soc. — 4th Mon. (Sept.-June)
Pres., Carl Hutchinson, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society — Quarterly
Pres., Otto J. Penna., Spokane
Sec., Robert E. Jensen, Spokane

Tacoma Academy of Internal Medicine—4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle
Sec., John E. Nelson, Seattle

Washington Academy of General Practice—Meeting, May 2-3, 1968, Tyee Motor Inn, Olympia
Pres., William Mead, Seattle

Washington State Radiological Society—Quarterly, Seattle
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists Quarterly Seattle Annual Meeting
Pres., Richard J. Ward, Seattle
Sec., Philip Bridenbaugh, Seattle

Wash. St. Soc. of Allergy
Pres., Paul Van Arsdel, Jr., Seattle
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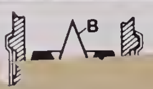

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Northwest Medicine

VOLUME 66 • NUMBER ~~10~~ 11

November 1967

CHARLES D. MULLER, M.D.

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References:

(1) Siver, R. H.: CMD, *21*:109, September 1954. (2) Frykman, H. H.: Minn. Med., *38*:19-27, January 1955. (3) McGivney, J.: Tex. State Jour. Med., *51*:16-18, January 1955. (4) Quehl, T. M.: Jour. of Florida Acad. Gen. Prac., *15*:15-16, October 1965. (5) Weekes, D. J.: N.Y. State Jour. Med., *58*:2672-2673, August 1958. (6) Weekes, D. J.: EENT Digest, *25*:47-59, December 1963. (7) Abbott, P. L.: Jour. Oral Surg., Anes., & Hosp. Dental Serv., 310-312, July 1961. (8) Rapoport, L. and Levine, W. I.: Oral Surg., Oral Med. & Oral Path., *20*:591-593, November 1965.

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Code of Fair Practices

Promotion of Drug Products

September 1967

Recognizing the importance to the public health of providing the medical profession with accurate information on drug products, and the need to assure that PMA members, their employees and agents present such information fairly and objectively, the Pharmaceutical Manufacturers Association hereby promulgates and adopts the following Code of Fair Practices in the Promotion of Drug Products as a revision of its 1958 statment of Principles on the same subject:

code standards

1. As used in this Code:

(a) The term "drug product" means any pharmaceutical or biological product intended for use in the diagnosis, cure, mitigation, treatment or prevention of disease in humans, or to affect the structure or any function of the human body, which is promoted and advertised to the medical profession rather than directly to the lay public.

(b) The term "promotional communications" means (1) journal advertising, mailing pieces, and similar written materials (including, to the extent reasonably practicable, films, exhibits and similar visual presentations) directed to members of the medical profession by the pharmaceutical industry for the purpose of promoting a drug product and (2) written instructions and materials, prepared for sales or professional representatives, containing representations to be made by them to members of the medical profession. Where compliance with the requirements of this Code is not reasonably practicable within the format of a film, exhibit or similar visual presentation, written materials meeting those requirements shall be distributed to all members of the medical profession attending the presentation.

(c) The term "medical profession" includes allied professions in the health field.

2. Complete and accurate information concerning marketed drug products should be made available promptly to the medical profession. Promotional communications to the medical profession which include a description of indicated uses or dosage recommendations for a prescription drug product should also include a summary (or full disclosure where required by law) of side effects, precautions, warnings and contraindications, and of effectiveness for the described indicated uses. Such summary should have sufficient prominence in terms of type size, location and similar factors to provide reasonable assurance that it will be observed.

3. Statements in promotional communications should be based upon substantial scientific evidence or other responsible medical opinion. Claims should not be stronger than such evidence warrants. Every effort should be made to avoid ambiguity. Whenever statistical or background information or references to unpublished literature or observations are used in promotional communications, the source material should be available to the medical profession upon request.

4. Statements with respect to or quotations from medical literature or from the personal communications of clinical investigators in promotional communications should not distort the intended meaning of the author or the significance of the study.

5. Any comparison with other drug products should be made upon a valid scientific basis.

6. No public communication by a manufacturer shall be made with the intent of promoting a drug product as safe and effective for any use before the required approval of the drug product for marketing for such use is obtained. However, this provision is not intended to abridge the right of the scientific community and the public to be fully informed concerning scientific and medical progress. Thus it is not intended to restrict a full and proper exchange of scientific information concerning a drug product, including appropriate dissemination of investigational findings in scientific or lay communications media, nor to restrict public disclosure to stockholders and others concerning any drug product as may be required or desirable under law, rule or regulation.

7. Promotional communications should have medical clearance before their release.

code administration

It is the unqualified intent of the Association that each member shall follow strictly the principles set forth in the Code. To that end the members of the PMA are encouraged to submit information to the President with respect to any alleged breach of this Code by any other member. On the basis of

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A trend in private mental hospitals in recent years has been the shift away from the closed medical setting. North Shore Hospital, a pioneer in this movement, has a mixed staff, serving physicians in private practice who follow their patients into the hospital. At the same time, a qualified house staff provides continuity of care and helps establish the necessary therapeutic milieu. Today, the hospital has 40 psychiatrists and other medical specialists in attendance.

The private psychiatric facility traditionally has been a pace setter in care of the mentally ill. A factor which continues to make this possible is the rapid growth of medical insurance, offered now without discrimination against the psychiatric patient. The acceptance of the fee-for-service concept by referring governmental agencies also stimulates good psychiatric service.

The hospital is a member of the Illinois Blue Cross and is authorized to accept dependents of active and retired military personnel. It also has been approved by Social Security Administration for Medicare patients who can benefit from short term therapy in an accredited private psychiatric hospital.

The outstanding institutions of care for the emotionally ill are well known nationally and, in turn, serve an unrestricted geographic area. Located at the hub of America, North Shore Hospital, in effect, receives patients at this end of their "flight into health," only a few hours away from home.

Telephone or write to Charles H. Jones, MD—Superintendent & Psychiatrist-in-Chief, North Shore Hospital, 225 Sheridan Road, Winnetka, Illinois, Telephone (312) 446-8440.

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such information and any other information available to him, the President shall take appropriate action including, if required, referral of the information to an ad hoc committee of the Board. The committee shall be chosen by the Chairman of the Board unless the member company represented by the Chairman has submitted such information or is the subject of such information, in which case the President shall make the appointments. The General Counsel of the Association shall act as secretary of each ad hoc committee and shall report the committee's findings to the President who in turn will refer the findings to the Board of Directors.

Any member firm which clearly and persistently violates the Code may be asked by the Board of Directors to resign from the Association.

September, 1967

BOOKS

RECEIVED: The following books have been received. Publication of this acknowledgement is to be considered adequate return to the sender. Selected titles will be reviewed as space permits.

The ecology and etiology of human disease. By Kingsley M. Stevens, M.D., Associate Professor of Medicine, Assistant Professor of Microbiology, Associate Physician, University Hospital, University of Kentucky, Lexington, Kentucky. Price $7.50. 201 pp. Charles C Thomas. 1967.

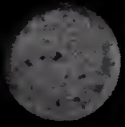
Practical ocular motility. Hazel M. Dendy, D.B.O., Orthoptist, N.Y. University, Bellevue Medical Center, New York and Elizabeth T. Shaterian, Orthoptist, New York University Bellevue Medical Center, New York. 196 pp. Price $9.50. Charles C Thomas, Springfield, Ill. 1967.

Diabetes mellitus: Diagnosis and treatment. Vol. II. Editors: George J. Hamwi, M.D., and T. S. Danowski, M.D., American Diabetes Association, Inc. 2 volumes. Illustrated. Price—Vol. I, $2.00; Vol. II, $2.50; both $4.25. 1967. (Vol. I, 1964).

The growth of medicine. By Frederick Stenn, M.D., Northwestern University Medical School, Chicago, Illinois. 199 pp. Price $9.50. Charles C Thomas, Springfield, Ill. 1967.

Roentgenologic diagnosis. By J. George Teplick, M.D., Clinical Associate Professor of Radiology; Marvin E. Haskin, M.D., F.A.C.P., Clinical Asst. Professor of Radiology; and Arnold P. Schimert, M.D., formerly Associate Professor of Radiology, all of Hahnemann Medical College, Philadelphia. 2 volumes, 1198 pp. Illustrated. Price $38.00 the set. W. B. Saunders Co., Philadelphia. 1967.

The pediatric patient (1967). By Sarah R .Gustafson, Ph.D. Director Dept. of Medical Literature, Hoffmann-LaRoche, Inc., and David Baird Coursin, M.D., F.A.A.P., Director of Research, Research Institute, St. Joseph's Hospital, Lancaster, Penn. 272 pp. Illustrated. L. B. Lippincott Co., Philadelphia. 1967.



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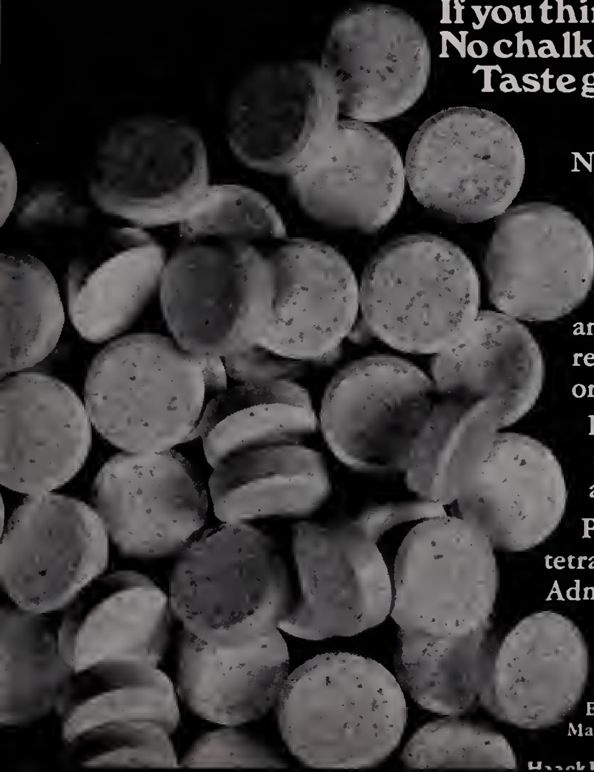

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NOTES

Campus conservatism. Students are becoming more conservative, according to two surveys conducted by the National Federation of Independent Business and one by the Chamber of Commerce of Cape Girardeau, Missouri. Findings differ materially from those reported from a survey conducted during the New York Fair. Questions covered such things as the importance of profit, advantage of capitalism over communism, freedom of the press and the significance of patriotism. Conservative answers in the three recent surveys ran from 98 to 67 per cent, with most in the 85 plus range.

History buffs will appreciate a list of publications available through the Oregon Historical Society Press, 1230 SW Park Avenue, Portland 97205. Hardcover and paperback books, pamphlets, bibliographic aids, maps, motion picture films, microfilms, and back issues of The Oregon Historical Quarterly, and Transactions of the Oregon Pioneer Association may be purchased. The list indicates a splendid storehouse of Northwest historical material. Every issue of more than 50 Oregon newspapers has been copied on microfilm. There is a 16 mm, sound film on Oregon history from the time of Captain James Cook to the present, and copies of publications dating as far back as 1783. Several items refer to John McLoughlin, the physician known as the "Father of Oregon".

Nonpaid part-time faculty members outnumber paid. According to the Association of American Medical colleges there are 4,129 paid, part-time faculty members serving medical students and 25,165 who are not paid. Departments of medicine, psychiatry, and surgery utilize most of the part-time faculty members.

A billion dollar bundle. The Senate has passed S. 2388, the Economic Opportunity Act Amendments of 1967, calling for an appropriation of $1,062 million. It appears to be a bundle of "programs" many of medical interest: Project Headstart, comprehensive health services, including nutrition, to preschool children; Project Follow-Through, similar service to kindergarten and elementary school children; health centers in areas of much poverty; support of agencies that augment skills in health services for the poor; encouragement of health professionals to serve the poor; family planning; and other activities.

Radiation from electronic devices, such as television sets, may get federal control. Subcommittee on Public Health and Welfare of the house Commerce Committee has been holding hearings on H.R. 10790, proposing research, and development of standards. Representatives of the American College of Radiology have expressed interest in the bill and have suggested sources for consultation before stands are adopted.

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the two most widely used antacids—magnesium and aluminum hydroxides—to help secure rapid acid neutralization with little chance of laxation or constipation;

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the defoaming action of simethicone—to help relieve the painful gas symptoms which often accompany peptic ulcer.

Mylanta®

antacid therapy plus an added benefit

nonfatiguing flavor/smooth pleasant texture; both assure patient cooperation during long-term therapy.

Stuart Division of / ATLAS CHEMICAL INDUSTRIES, INC. / Pasadena, Calif.

BOOKS:

Mechanical artificial ventilation: A manual for students and practitioners. By Terring W. Heironimus, III, M. D., Diplomate, American Board of Anesthesiology, Asst. Professor of Anesthesiology, University of Virginia School of Medicine, Charlottesville, Virginia. 102 pp. Illustrated. Price $5.75. Charles C Thomas, Springfield, Ill. 1967.

The patient's progress. By Felix Marti-Ibanez, M.D., Editor-in-Chief of the Medical Newsmagazines MD, MD of Canada, MD en Espanol, and MD Pacific; former Professor and Chairman of the Dept. of History of Medicine, New York Medical College. 150 pp. Price $5.95. MD Publications, Inc., New York. 1967.

Classical articles in urology. Compiled and edited by Mark A. Immergut, M.D., F.A.C.S. Asst. Professor of Urology, Department of Urology, University of Iowa College of Medicine, Iowa City, Iowa. 329 pp. Illustrated. Price $20.75. Charles C Thomas, Springfield, Ill. 1967.

Case of the day. By Benjamin Felson, M.D., Professor & Director, Dept. of Radiology, University of Cincinnati College of Medicine and Jerome F. Wiot, M.D., Professor of Radiology, University of Cincinnati College of Medicine, Cincinnati, Ohio. 83 pp. Illustrated. Price $8.50. Charles C Thomas, Springfield, Ill. 1967.

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Butazolidin®, phenylbutazone
In Acute Superficial Thrombophlebitis

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

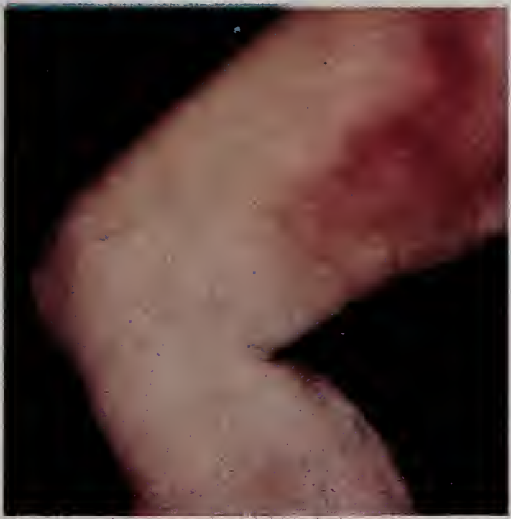
Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis, exfoliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

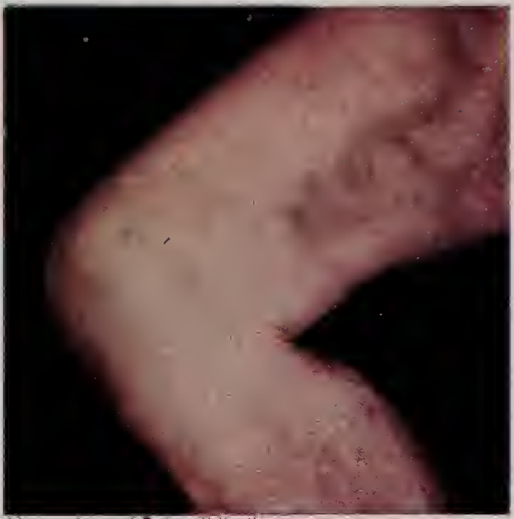
Dosage in Acute Superficial Thrombophlebitis: Initial: 6 capsules or tablets daily in divided doses for 2 or 3 days. Maintenance: 3 capsules or tablets daily. Usual duration of therapy is 5 to 7 days (rarely beyond 10 days). 6509-V(B)R2

*Stein, I.D.: Presented at the American Academy of General Practice, Dallas, Sept. 1967.

For complete details, please see full prescribing information.

it used to take weeks


Acute superficial thrombophlebitis before treatment


After 5 days of Butazolidin therapy

In acute superficial thrombophlebitis, patients were usually bedfast for 2 to 4 weeks, tying up hospital beds, requiring costly nursing care and time-consuming procedures such as warm soaks and packs.

When Butazolidin was added to the usual regimen, 960 of 1000 patients obtained complete resolution; most required only 30 capsules or tablets; relief of pain and discomfort and regression of inflammatory signs and fever occurred within a few days.*

Side effects occurred in 6% of the 1000 patients. While none were serious or long-lasting, Butazolidin can produce severe side effects in rare instances. Further, not every patient can take Butazolidin. Therefore, select patients with care and follow them closely. Contraindications, Warning, Precautions and Adverse Reactions are summarized in adjacent column.

Butazolidin gets bedfast thrombophlebitics out of bed, fast. Usual duration of treatment is 5 to 7 days, and rarely exceeds 10 days. Try it and see. For full details, please refer to the complete prescribing information.

Butazolidin® alka
Capsules:
phenylbutazone, 100 mg.; dried aluminum hydroxide gel, 100 mg.; magnesium trisilicate, 150 mg.; homatropine methylbromide, 1.25 mg.

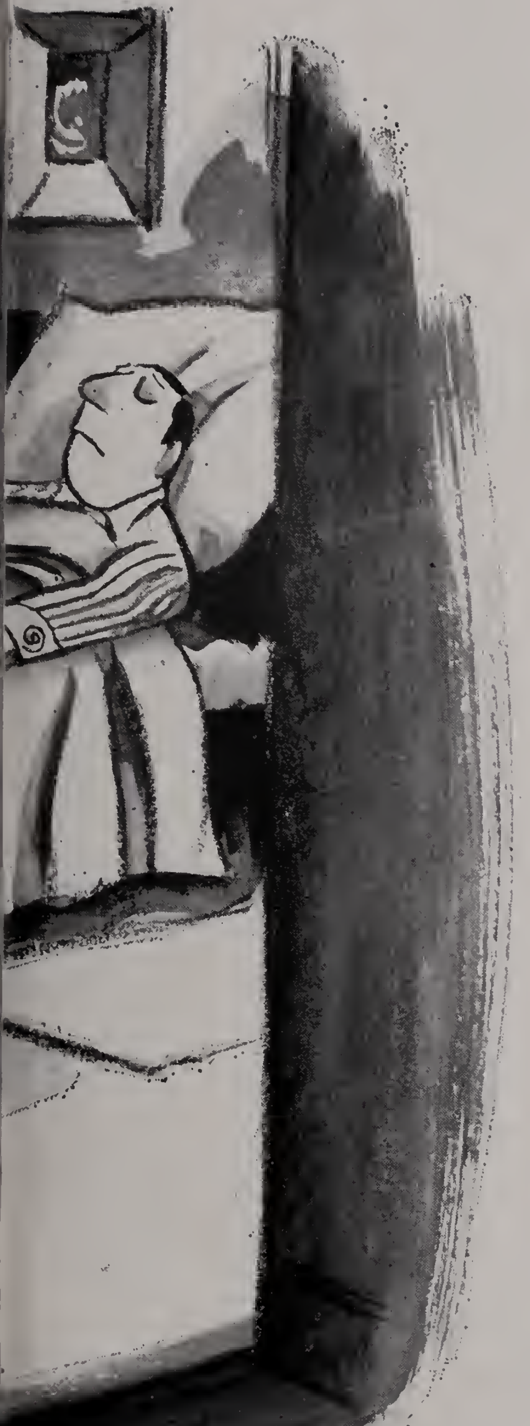
Butazolidin®
phenylbutazone
Tablets of 100 mg.

Geigy

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York

BU-4687PC

"George wants to know if it's okay to take his cold medicine now, Doctor, instead of seven o'clock?"



The long-continued action of Novahistine LP should help you both get a good night's sleep. Two tablets in the morning and two in the evening will usually provide round-the-clock relief by helping clear congested air passages for freer breathing. Novahistine LP also helps restore normal mucus secretion and ciliary activity—normal physiologic defenses against infection of the respiratory tract. Use cautiously in individuals with severe hypertension, diabetes mellitus, hyperthyroidism or urinary retention. Caution ambulatory patients that drowsiness may result. Each Novahistine LP tablet contains: phenylephrine hydrochloride, 25 mg., and chlorpheniramine maleate, 4 mg.

NOVAHISTINE® LP

DOW **PITMAN-MOORE** Division of The Dow Chemical Company, Indianapolis

Against these three major pathogens...
Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemoly c Streptococci

V-Cillin K® provides dependable oral antibacterial therapy

because it combines a high degree of activity...

V-Cillin K has been shown to be effective in the treatment of streptococcus and pneumococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy in patients with a history of rheumatic fever or congenital heart disease.

with high blood levels, even when taken with food

V-Cillin K is stable in acid and immediately soluble. High serum levels, therefore, are reached rapidly. Because it is acid stable, V-Cillin K is well absorbed even when taken close to mealtime. These desirable properties help make V-Cillin K a dependable penicillin for oral use.

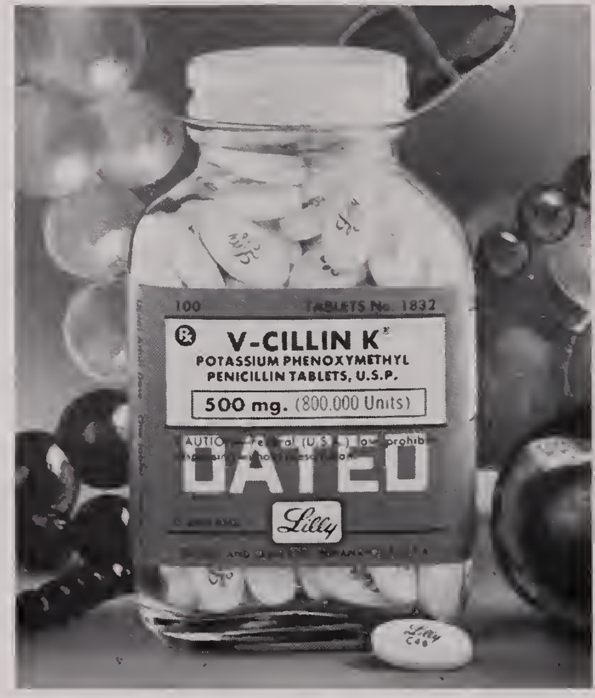
V-Cillin K® Lilly 701449

Potassium Phenoxymethyl Penicillin

Now available: V-Cillin K®, Pediatric, for Oral Solution, 250 mg. (400,000 units) per 5 cc. of solution.

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

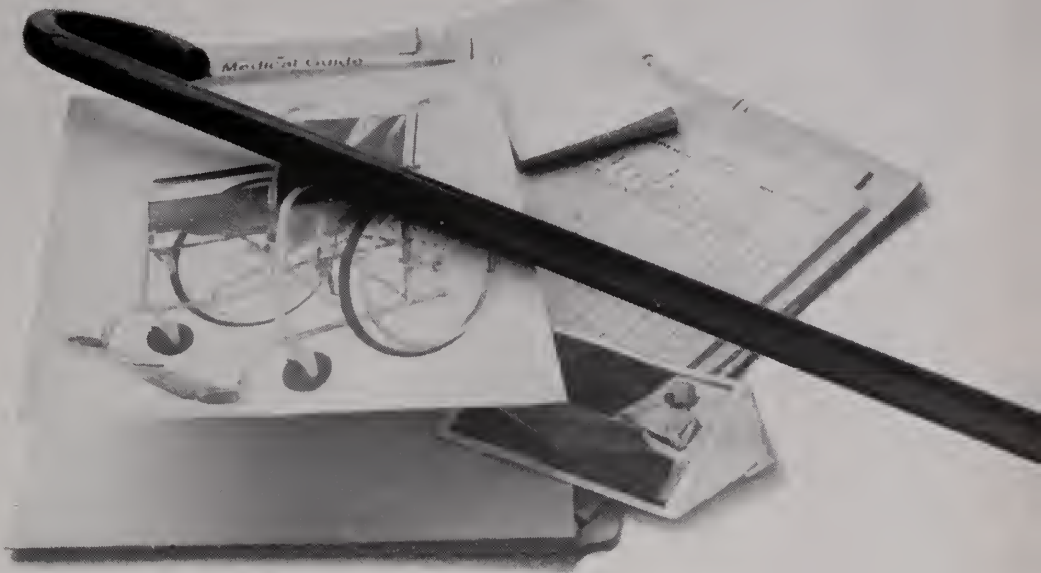
How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

701449



in chronic illness

B and C vitamins are part of therapy: An imbalance of water-soluble vitamins and chronic illness often go hand in hand. STRESSCAPS capsules, containing therapeutic quantities of vitamins B and C, are formulated to meet the increased metabolic demands of patients with physiologic stress. In chronic illness, as with many stress conditions, STRESSCAPS vitamins are therapy.

Stresscaps®

Stress Formula Vitamins Lederle

FOR PROFESSIONAL RECOMMENDATION ONLY

Each capsule contains:

Vitamin B_1 (as Thiamine Mononitrate)	10 mg
Vitamin B_2 (Riboflavin)	10 mg
Vitamin B_6 (Pyridoxine HCl)	2 mg
Vitamin B_{12} Crystalline	4 mcgm
Vitamin C (Ascorbic Acid)	300 mg
Niacinamide	100 mg
Calcium Pantothenate	20 mg

Recommended intake: Adults, 1 capsule daily, for the treatment of vitamin deficiencies. Supplied in decorative "reminder" jars of 30 and 100; bottles of 500.

LEDERLE LABORATORIES, A Division of American Cyanamid Company, Pearl River, New York Lederle

628-6—3614

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

Impressive clinical results in a wide range of dermatologic problems

The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar®
fluocinolone acetonide

Turn page for contraindications, precautions and side effects.

For everyday topical steroid therapy
Synalar® 0.01%
fluocinolone acetonide
provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream – 5, 15 and 60 Gm. tubes.

fluocinolone acetonide — an original steroid from

SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg. c̄ mestranol 0.05mg.)

Turn page for contraindications, precautions and side effects.

Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Prescribing Information

Contraindications: Patients with any symptoms or history of thrombophlebitis, pulmonary embolism, liver dysfunction or disease, carcinoma of breast or genital organs, or undiagnosed vaginal bleeding.

Warnings: Discontinue medication pending examination if there is sudden partial or complete loss of vision, proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. The safety of Norinyl-1 in pregnancy has not been demonstrated. If a patient misses two consecutive periods, pregnancy should be ruled out before continuing the medication. If she has not adhered to the prescribed schedule, pregnancy should be considered at the first missed period. Active ingredients of oral contraceptives have been detected in the milk of mothers who received these drugs; the significance to infants has not been determined.

Precautions: Pretreatment physical should include examination of the breasts and pelvic organs, as well as a Papanicolaou smear. If endocrine or liver function tests are abnormal during therapy, repeat tests are recommended after the drug has been withdrawn for two months. Following administration of drug, preexisting uterine fibromyomata may increase in size. Careful observation and caution are required for patients with symptoms or history of epilepsy, migraine, asthma, cardiac or renal dysfunction, cerebrovascular accident, psychic depression, and diabetes. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. Possible long-term effects of the drug on pituitary, ovarian, adrenal, hepatic or uterine function must await further studies. The physician should be alert to the earliest manifestations of thrombophlebitis and pulmonary embolism. The drug should be used judiciously in those young patients in whom bone growth is not complete. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask symptoms of the climacteric. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression. Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation posttreatment, premenstruallike syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, and itching. The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has neither been established nor disproved): thrombophlebitis, pulmonary embolism, neuroocular lesions.

The following laboratory tests may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from

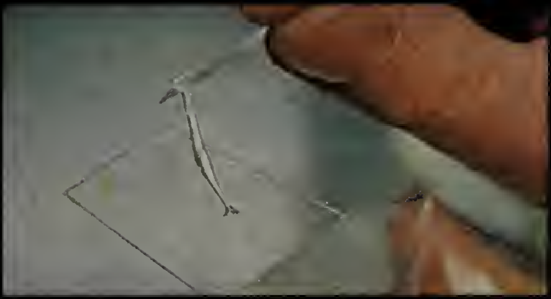
SYNTEX

LABORATORIES INC., PALO ALTO, CALIF.

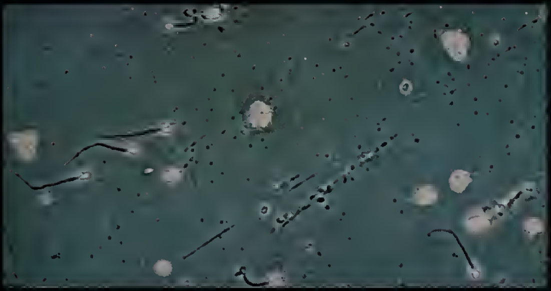
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

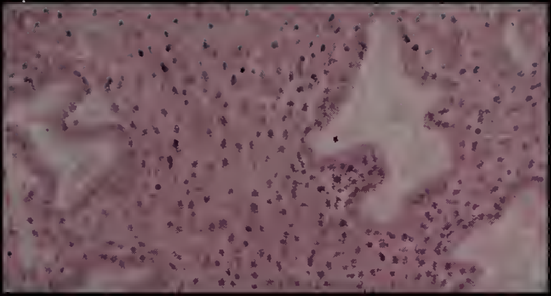
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.

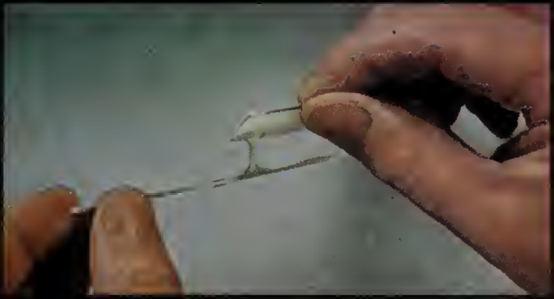


Spermatozoa appear healthy, active, freemoving.

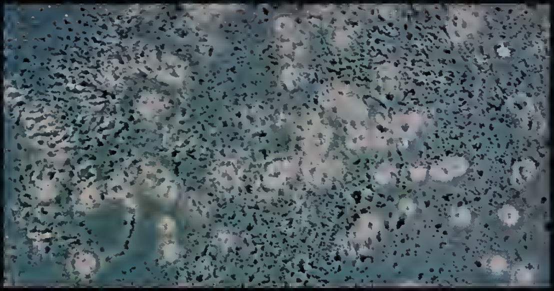


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

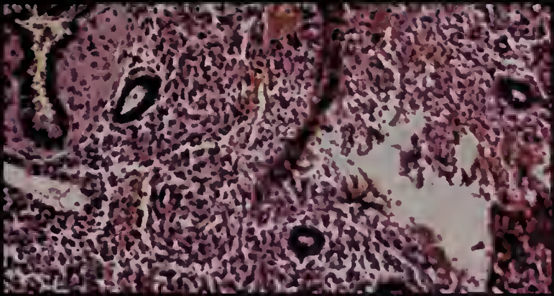
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-l.



Norethindrone in Norinyl-l accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1
(norethindrone 1mg. c̄ mestranol 0.05mg.) tablets

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost

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These Syntex men serve the physician

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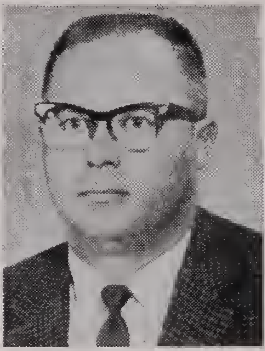

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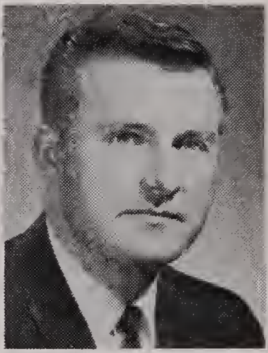

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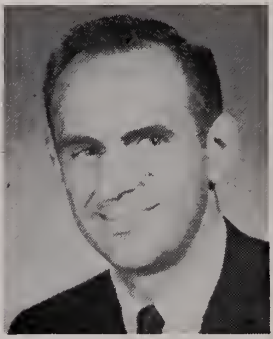

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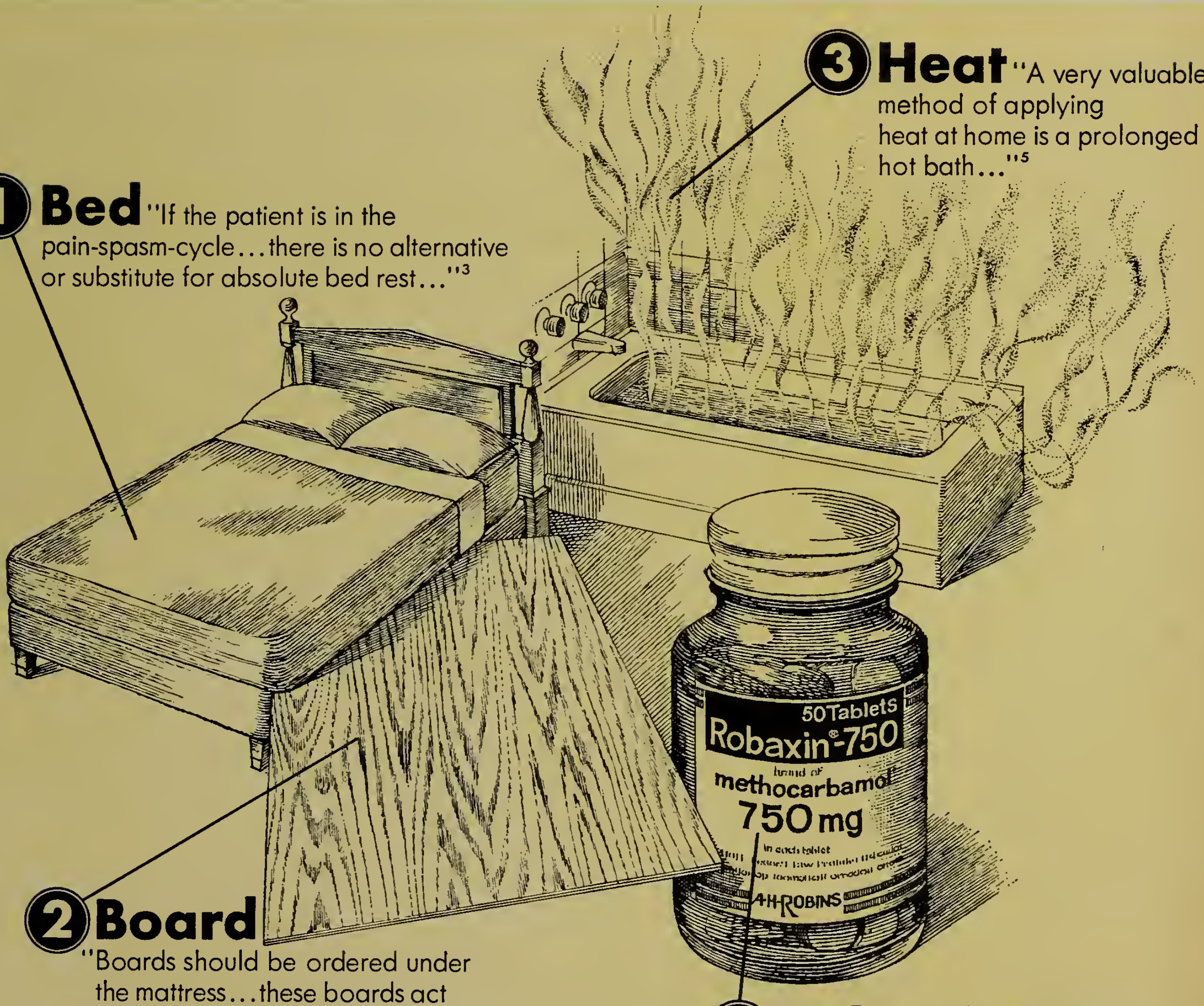
LABORATORIES INC. PALO ALTO, CALIF.

LOW-BACK PAIN

A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:



③ Heat "A very valuable method of applying heat at home is a prolonged hot bath..."[5]

① Bed "If the patient is in the pain-spasm-cycle...there is no alternative or substitute for absolute bed rest..."[3]

② Board "Boards should be ordered under the mattress...these boards act by immobilizing the spine..."[4]

④ Robaxin®-750
(methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm "...without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated for relief of skeletal muscle spasm. **Contraindicated** in hypersensitive patients. **Side Effects** (lightheadedness, dizziness, drowsiness, nausea) may occur rarely, but usually disappear on reduced dosage. Hypersensitivity reactions develop infrequently. See product literature for further details. **Also available:** Robaxin® Tablets (methocarbamol, 500 mg.) Robaxin Injectable (methocarbamol, 1 Gm./10 cc.)
References: (1). Godfrey, C.M.: Applied Therap. 8:950, 1966. (2). Gottschalk, L.A.: GP 33:91, 1966. (3). Rowe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cozen, L.: South Dakota J. Med. 18:26, 1965. (5). Soto-Hall, R.: Med. Sc. 14:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteopath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New York J. Med. 62:1985, 1962.

A·H·ROBINS A. H. ROBINS COMPANY
RICHMOND, VIRGINIA 23220

Don’t let monilia cut broad-spectrum therapy short…

start with Tetrex-F®

tetracycline phosphate
complex-nystatin

Use of broad-spectrum antibiotics can cause fungal overgrowth in the alimentary tract… and give rise to symptoms so troublesome that therapy must be prematurely stopped. Tetrex-F (tetracycline phosphate complex-nystatin) helps you circumvent this problem.

The nystatin can prevent overgrowth of monilia; the phosphate complex delivers tetracycline to the blood rapidly. Side effects are infrequent.

High-Risk Patients

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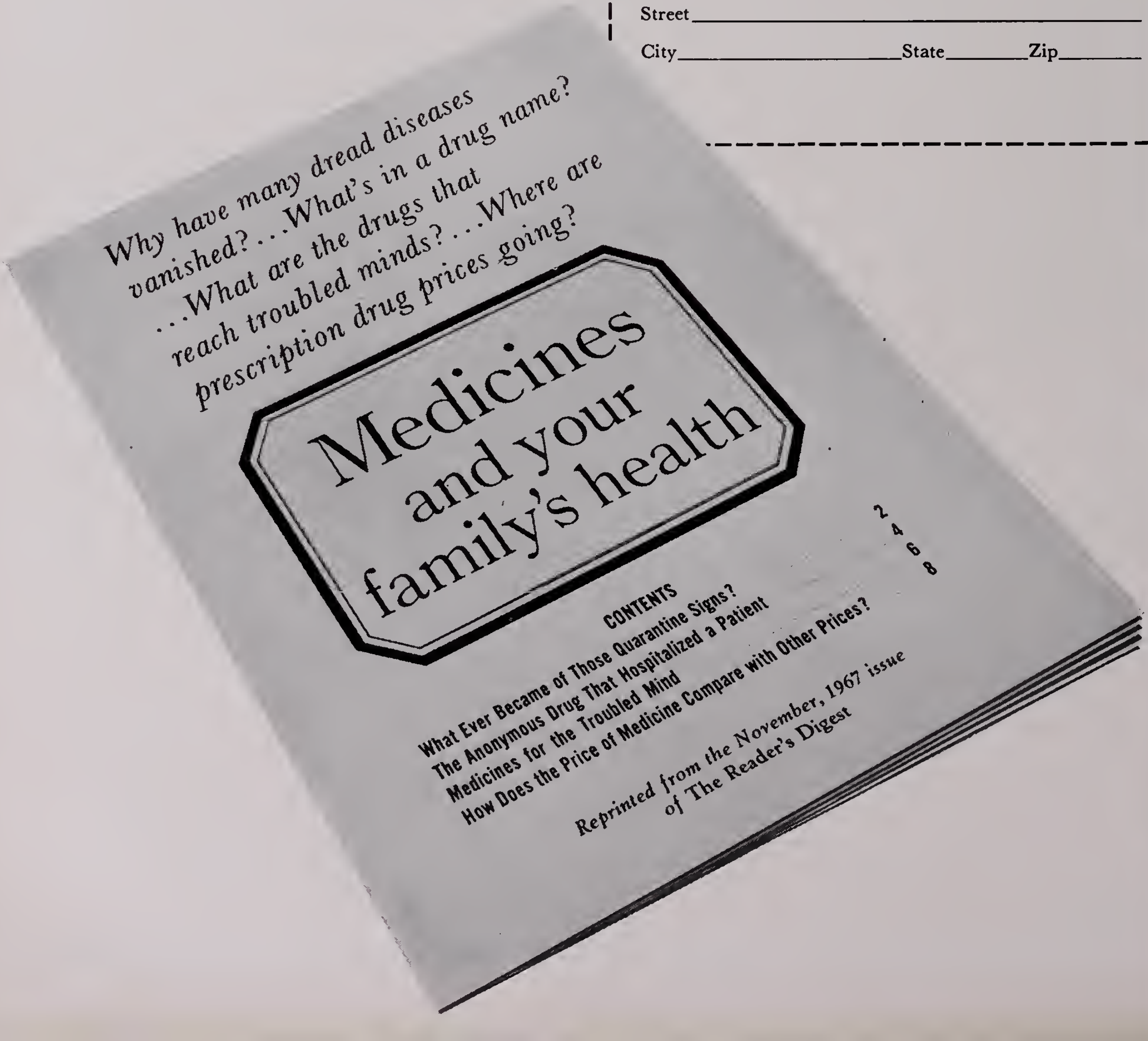

Why have many dread diseases vanished?...What's in a drug name? ...What are the drugs that reach troubled minds?...Where are prescription drug prices going?

Medicines and your family's health

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Reprinted from the November, 1967 issue of The Reader's Digest

Family Planning in the Pacific Northwest

Organized effort in family planning in the Pacific Northwest has lagged behind many areas of the country. The seminar at Eugene, last January, was presented for the purpose of providing current information on programs and methods to public health workers in Oregon. Dr. Brodie, whose report to the seminar appears in this issue, has presented the current status of family planning programs in Oregon, together with a background history of the movement. The seminar succeeded in imbuing every registrant with urgent resolve to get on with providing family planning service to all people who need and desire it.

While Oregon's birth rate has continued to drop to lowest levels since 1941, we still have a population growth problem. We must be concerned not only with our own problems but with the broader world population explosion. As public health workers, we must have vital concern for the health problems of prospective mothers, married or unmarried and, even more important, about the product.

If we are to make any real inroads against mental retardation, and other congenital defects, we must provide better prenatal and obstetrical care. Approximately 50 per cent of these tragedies are directly preventable if we apply present knowledge. Possibilities of direct treatment of the newborn are already at hand and new techniques are being developed.

Public health can no longer be satisfied that responsibility for high quality maternity care rests exclusively on the private sector of medicine. Hospitals too long have been considered a physician's work shop. They must emerge as community health centers with public health having a direct involvement in policy and in service rendered. Oregon can be proud of the fact that there was only one maternal death in 1965, the lowest on record, but deaths rose to four in 1966. We cannot be complacent, and we must not depend on statistics, for they only indirectly reflect quality. It was apparent from a recent survey conducted by the Maternal and Child Health Section of the Oregon State Board of Health that health departments have little direct knowledge of what goes on in the hospitals in the local jurisdictions, and even less knowledge concerning the quality of care provided by the physician.

Family planning should be a part of the total care of every woman during her entire child bearing period. Ideally, it should be, and eventually it must be, an integral part of total health care. Even if Title XIX provides comprehensive medical care to low income women, for some time to come the desire for anonymity and the utilization of a full range of professional services will require that health departments provide family planning services in a clinic setting. The local situation will determine whether the health department, hospital, or community health station, is the best location for a family planning clinic. Every one of us knows situations where family planning could have prevented unwanted children, personal tragedy, and unnecessary burdens on the tax payer.

One of the principal, basic roadblocks to the provision of family planning service in Oregon is lack of training of personnel. We must see to it that our medical school provides adequate instruction to future physicians in techniques of birth control and sex education to its broadest sense. Nurses, social workers, and educators must feel comfortable in dealing with their respective roles in this field.

Planned Parenthood Association of Oregon is serving as an excellent training center for teaching specific techniques. This organization should receive our support so that it can extend this function, and more effectively mobilize community interest and support through direct consultation to local areas.

Maternal and Child Health funds can be used to support local services until the value of these services is so demonstrated that the community is willing to assume its responsibility. This is one conference that can realize immediate results. It is hoped that more health departments will plan to work with their communities to set up family planning clinics. ■

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Endoprosthetic Arthroplasty Of Rheumatoid Knees

JAMES W. BROOKE, M.D., Eugene, Oregon

Five endoprosthetic arthroplasties in five rheumatoid knees yielded results satisfactory to the patients. Application was bilateral in one patient. Pain relief was significant to all patients. The joints tolerated full weight bearing and there was good muscular control. One such arthroplasty in a joint disorganized by trauma 7 years previously and probably the site of dormant sepsis, gave initially good results but was complicated by the development of severe infection five months after operation. Amputation was required. A striking, and probably highly significant, result in all cases, including the first five months of one unsuccessful case, was return of good quadriceps power and loss of skin abnormalities associated with the vasomotor imbalance usually seen.

The Waldius hinge endoprosthetic arthroplasty appears to offer something better than a wheelchair existence for those whose knees have progressed to the point of total or near total disability as result of rheumatoid arthritis.[1] Mobility can be restored if the patient is willing to accept a goal short of full function and stressful use. This is a preliminary report of its use in six instances.

arthrodesis or arthroplasty

In spite of good conventional therapy, advanced rheumatoid disease of one or both knees often forces the victim to live a wheel chair existence. In light of current inability to stimulate adequate reparative processes, therapy is limited to salvage surgery—arthrodesis or arthroplasty—when disorganization of the joint has occurred.

Arthrodesis achieves a painless stability and is desirable under certain circumstances. One stiff knee is not too much of a handicap; two are. Since rheumatoid disease is so often characterized by bilateral involvement, preservation of motion is particularly desirable. In this desire, the biology of the disease is a help to the surgeon.

The patient with non-rheumatoid arthritis is a well individual with relatively normal tissue. He seeks function comparable to the function in his other joints, else dissatisfaction ensues. Not so the rheumatoid. He is sick systemically. His tissues are different, physically as well as biochemically. If one joint is improved, not infrequently such improvement will give it a functional capacity beyond the functional capacity of the body as a whole. The patient is pleased with the improvement rather than disappointed with lack of normal function.

There have been many efforts at arthroplasty of knees. There have been fascial arthroplasties, membrane interposition arthroplasties,[3,4] hemiarthroplasties,[5] and endoprosthetic arthroplasties.[1-6] None has been an unqualified success and some yield an appreciable and acceptable degree of improvement.

metallic implants

Here are several objections to the use of metallic implants: 1. They are foreign materials. 2. As the modulus of elasticity of metal is different from that of the host bone, some loosening at the bone-metal contact points can be expected. 3. A certain amount of electrolytic activity appears inevitable. Whether this is good or bad is beside the point—it is not physiologic. 4. The physiologic arc of motion is not preserved (the medial screwing motion during last few degrees of extension and the shifting axis of flexion). 5. Durability is undetermined.

If the choice lies between an imperfect arthroplasty of reasonable durability and painful confinement to bed, brace or wheel chair, the shortcomings of the arthroplasty do not appear so serious.

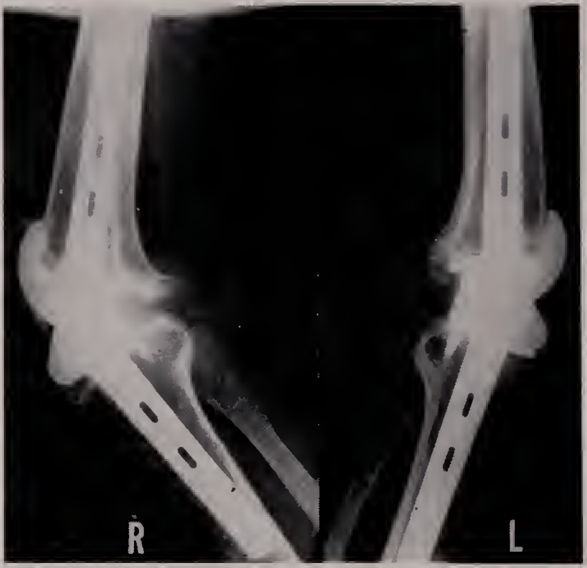

Fig. 1 Case 1, Walldius Prosthesis in situ 34 months on right and 27 months on left. Both knees are stable and painless.

CASE REPORTS

Case 1. A 35-year-old housewife with extensive rheumatoid arthritis had been treated with various medications. The principal impediment to walking was involvement of both hips, both knees and feet. She has been treated by casting after the technique of Kellgren, with some benefit. After a series of intra-articular injections of hydrocortisone an osmic acid synovectomy was attempted but was without significant benefit. The patient continued to be confined to a wheel chair. An endoprosthetic replacement arthroplasty was performed on the right knee in February, 1964. Her postoperative course was excellent and was accompanied by a relatively swift redevelopment of the quadriceps and diminution of pain. The patient requested performance of the same procedure on the opposite, similarly involved, extremity. This was done in September, 1964. Her second postoperative course was uneventful. Her systemic complaints began to subside. Weight bearing was commenced after the tissues had healed satisfactorily. Six weeks after the second arthroplasty, she was doing pool walking. Four months later she walked with aid of an attendant, the bilateral shoulder involvement preventing use of axillary crutches. One year after the second operation, only progressive hip involvement prevented full weight bearing. In December, 1966, she was hospitalized for intensive physiotherapy, at which time intra-articular chloroquine to the hips reduced hip pain and resulted in ability to walk with the aid of ulnar platform crutches. Each knee was painless, stable, and had good extension power. The general systemic disease appeared to be quiescent. Figure 1 illustrates the appearance of the prostheses in situ after three and two years respectively.

Case 2. A 62-year-old male had extensive, generalized, rheumatoid arthritis, with the right knee the principal impediment to independent walking. A Walldius endoprosthetic replacement arthroplasty was performed, March 10, 1965. He was hospitalized for 10 days. Three weeks later, when he returned for underwater exercises, he was walking in a long-leg, cylindrical cast. The patient's course, thereafter, was quite satisfactory. In June, 1965, he was walking freely and readily with only a minimum of distress. The knee was stable and painless. The patient was lost to follow-up at this point and what course was followed thereafter is unknown.

Case 3. A 41-year-old female had rheumatoid arthritis with involvement of the right knee being the principal impediment to weight bearing. There was also involvement of both hips. An earlier attempt to relieve difficulties in the right knee by a patellectomy had not been successful. She had been confined to a wheel chair. When first observed, she was receiving systemic steroids in diminishing doses. An arthroplasty was performed, November 11, 1964. Her postoperative course was uneventful. Within six weeks, she was able to flex her knee to 75° without distress, and was walking with full weight bearing but with the assistance of Canadian crutches. This patient was troubled by a "thunk" sound in the knee during heavy activity. On January 21, 1965, she was able to extend the knee fully and flex it to 90° without any difficulty. She walked freely and readily, with use of a cane only. She resorted to a cane or crutches only when she wanted to move swiftly. She gained weight. The

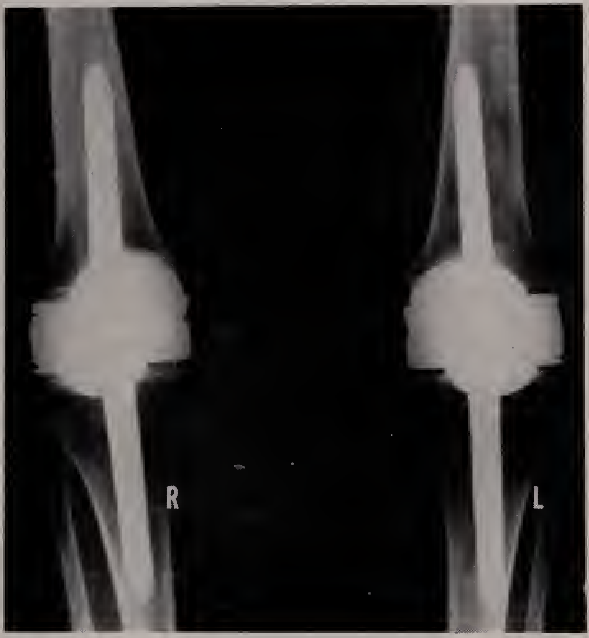

Fig. 2. Case 1, A-P view

quadriceps atrophy lessened. On February 8, 1965, she wrote that the knee was completely asymptomatic and that if the hips and ankles were as good as the knee, she would not have any impediment to walking. In December, 1966, she was still content with the function.

Case 4. A 53-year-old female had rheumatoid polyarthritis of 5 year duration. She had been treated with many medications, had a few injections of steroids into each knee with transient relief of symptoms, but she had progressive involvement of the right knee which constituted the principal impediment to walking and was a source of constant pain. An arthroplasty was performed, May 26, 1965. Her postoperative course was a little more uncomfortable than usual. After a week the acute tenderness subsided and her progress, thereafter, was uneventful. Weight bearing was commenced after approximately three weeks. In December, 1965, she walked fairly well with the aid of crutches but function steadily improved. The patient had developed some lateral wobble in this joint but it had vanished by April, 1966. In December, 1966, she walked without cane or crutches and was able to tolerate walking six blocks, after which she would experience only a dull pain.

Case 5. A 78-year-old male had extensive injury to the right knee and developed, thereafter, extensive degenerative changes with only 15° motion that was painful. At the time of the original injury, 7 years previously, a severe trimalleolar fracture of the right ankle had been sustained. During convalescence from this injury, the foot had been mal positioned, so that an equinus deformity of 60° was present. The opposite extremity had likewise been injured but posed no gross impediment to walking. Because of pain, amputation, arthrodesis and arthroplasty were discussed with him. After consultation with his family, he elected an arthroplasty. This was performed, November 3, 1965, with simultaneous elongation of the heel cord. The postoperative course was marked by constant complaints and reluctance to cooperate in physiotherapy. Three months after the surgery, he was able to walk, bearing full weight, utilizing a walker, with his foot flat to the floor. Five months after operation he developed a severe pyarthrosis. Aspirate of the knee yielded hemolytic staphylococcus aureus, coagulase positive. The patient had been afebrile from one week postoperatively until the pyarthrosis developed. He responded poorly to treatment and an amputation was necessary.

discussion

Use of a hinge prosthesis to replace knee joints destroyed by rheumatoid disease appears to be useful. All patients in this small series were pleased with the initial results. A surprisingly rapid redevelopment of quadriceps bulk and tone occurred. There was disappearance of the glassiness of skin and the mottling suggestive of vasomotor imbalance distally. Each rheumatoid patient noted lessening of morning stiffness and general malaise. Perhaps this was due to the synovectomy.

The one total failure was in an elderly individual whose joints had been destroyed by a septic arthritis. There had been no activity for 8 years. The painful knee and other injury residuals narrowed the choice of salvage procedures to either arthroplasty or amputation.

In retrospect, the performance of arthroplasty was an error in judgment. The long quiescent period after surgery during which the patient had steadily improving function, until the sudden development of a sepsis, is disquieting. It was not possible to tell whether the infection arose from a re-activated ancient focus or whether it was a *de novo* infection of hematogenous origin. Careful examination of the prosthesis stem sites in both the tibial and femoral medullary canals failed to establish presence of either bone-metal bonding or synovial syncytium. The joint, therefore, may be considered as no longer isolated by a synovial barrier but, rather, confluent with the medullary cavities of both tibia and femur. Whether this will prove to be a source of late complication must be determined by time.

conclusion

From this limited experience it appears that an endoprosthetic replacement arthroplasty using a hinge prosthesis fashioned of Vitallium may be of value: 1. if the choice lies between a wheel chair existence, arthrodesis and the arthroplasty; and, 2. full function and stressful use is not anticipated. ■

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abstracto

Cinco artroplastías endoprostéticas en cinco rodillas reumatoides, dieron resultados satisfactorios para los pacientes. La aplicación fue bilateral en un paciente. La calma del dolor fué de significado para todos los pacientes. Las articulaciones soportaron todo el peso y hubo buen control muscular. Una de estas artroplastiás en una articulación desorganizada por trauma hace siete años y probablemente sitio de una sepsis latente, inicialmente dió buenos resultados pero se complicó con el desarrollo de una infección severa cinco meses después de la operación. Requirió amputación. Los resultados sorprendentes y probablemente de gran significado en todos los casos, inclusive de los primeros cinco meses de un caso con malos resultados, fué el retorno de la fuerza del cuadriceps y la pérdida de las anormalidades de la piel asociadas con el desequilibrio vasomotor que generalmente se ve.

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The Congenitally Malformed

XIV The Child With Ambiguous Genitalia

PIERRE E. FERRIER, M.D., Seattle, Washington

A baby born with an intersex condition always represents a serious diagnostic and therapeutic problem. Congenital adrenal hyperplasia is an important and relatively frequent cause of intersexuality which must be recognized promptly since it may endanger the patient's life. It also is one of the inborn errors of metabolism which can be the most successfully treated. In the case of drug induced pseudohermaphroditism, unnecessary concerns and investigations can be avoided if an adequate gestation history is obtained. As far as true hermaphroditism and male pseudohermaphroditism are concerned, the danger is to make an erroneous decision as to the sex of rearing and undertake inappropriate surgical corrections. It is strongly emphasized that the degree of masculinization of the external genitalia (and not the genetic or gonadal sex) must be the primary consideration influencing the decision. Finally, the existence of the syndrome of testicular feminization should be known, and caution should be exerted when dealing with young female patients who present with inguinal "hernias". The usefulness of the simple buccal smear test for determination of the sex chromatin is evident.

The term intersex or intersexuality is generally reserved for those conditions in which the appearance of the genitalia is ambiguous at birth or does not conform with the sex of the gonads. Intersexuality should not be confused with disorders of psychic nature such as homosexuality, transsexuality or transvestism which manifest themselves in later life and are not characterized by anatomic anomalies at birth.

Birth of a child with defective or ambiguous genitalia is very distressing for the parents and creates an emotional climate in which the physician sometimes finds it difficult to maintain the necessary thoroughness and circumspection. Yet the initial decisions, diagnostic investigations and therapeutic measures are of critical importance and have an enormous bearing on the future welfare of the patient. In some instances the external genital abnormalities are not very conspicuous and may be overlooked at the time of birth. In other cases the sexual ambiguity is manifest, and yet wrong decisions are made or the essential diagnostic procedures are dispensed with, a neglect which may lead either to the death of the patient or to serious and permanent handicaps.

Our way of approaching the problem is outlined in Figure I and the present discussion is elaborated from the scheme. Establishing the patient's sex chromatin pattern from a buccal smear is the first diagnostic step.

chromatin positive intersex

The largest single group of babies with ambiguous genitalia is constituted by those affected with congenital adrenal hyperplasia. This recessive inborn error of metabolism affects males as well as females, but with very few exceptions only the female babies may have an intersexual state as manifestation of the disease. The finding of a positive (female) sex chromatin pattern in an intersex baby is in itself suggestive of congenital adrenal hyperplasia, on statistical grounds alone.

Simultaneously with the smear for sex chromatin a serum Na and K should be obtained and a 24-hour urine collection should be initiated in order to measure the 17-ketosteroid and pregnanetriol excretion (most clinical labora-

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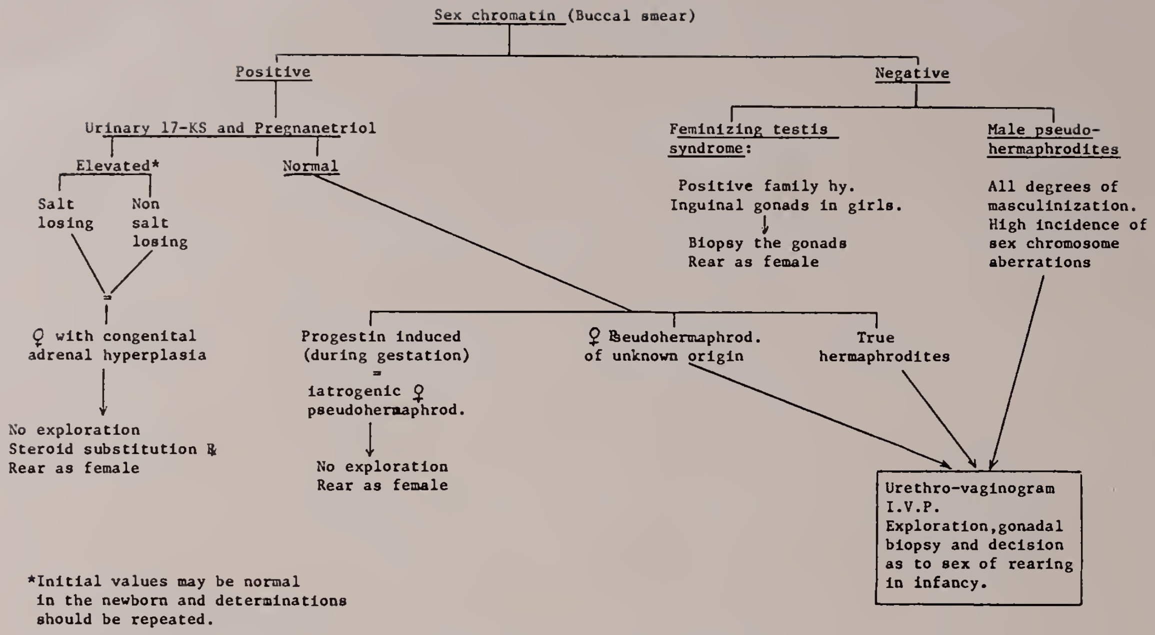
Sex chromatin (Buccal smear)
Positive
Negative
Urinary 17-KS and Pregnanetriol
Elevated*
Normal
Salt losing
Non salt losing
♀ with congenital adrenal hyperplasia
No exploration
Steroid substitution ℞
Rear as female
Progestin induced (during gestation)
=
iatrogenic ♀ pseudohermaphrod.
No exploration
Rear as female
♀ Pseudohermaphrod. of unknown origin
True hermaphrodites
Feminizing testis syndrome:
Positive family hy.
Inguinal gonads in girls.
Biopsy the gonads
Rear as female
Male pseudo-hermaphrodites
All degrees of masculinization.
High incidence of sex chromosome aberrations
Urethro-vaginogram
I.V.P.
Exploration, gonadal biopsy and decision as to sex of rearing in infancy.
*Initial values may be normal in the newborn and determinations should be repeated.

Fig. 1 Schematic representation of the work-up and management of cases of intersex.

tories are equipped to carry out a determination of the total urinary 17-ketosteroids, if not of pregnanetriol). In congenital adrenal hyperplaisa these substances tend to appear in excessive amounts in the urine, as a consequence of a block in the biosynthesis of cortisol by the adrenal glands. The enzymatic block (of variable severity) leads to the accumulation of steroid precursors, some of which are excreted as 17-ketosteroids and pregnanetriol.

Certain of these precursors of cortisol and their derivatives are androgenic and cause virilization of the female fetus in utero, hence the pseudohermaphroditic state so often present at birth. The degree of virilization is highly variable, depending on the time of onset in fetal life. It may be limited to a simple hypertrophy of the clitoris. In more severe cases the phallic hypertrophy is accompanied by variable degree of labial fusion. Occasionally the virilization of the genitalia is extreme and the appearance is that of a cryptorchid male, with or without hypospadias (Figure 2). Unfortunately there is no relationship between the degree of fetal virilization and the level of the urinary 17-ketosteroids shortly after birth. Hence if the initial value is low the test has to be repeated after a few days.

The finding of hyponatremia and hyperkalemia is very helpful in making the diagnosis. Some of these infants have a marked salt losing tendency (due primarily to the inability to manufacture enough aldosterone) and are in danger of dying of water and electrolyte disturbances (adrenal crisis) if proper measures are not taken immediately (administration of a saline solution intravenously and of desoxycorticosterone).

The male infants with congenital adrenal hyperplasia as a rule do not show any genital malformations but clearly are also in danger of expiring in an adrenal crisis. The female pseudohermaphrodite with congenital adrenal hyperplasia has normal female internal genitalia including normal ovaries, and if properly treated with substitutive cortisone therapy, will have normal growth and experience normal puberty at the usual age. No laparotomy is indicated to explore the internal organs, since all chromatin positive patients with congenital adrenal hyperplasia have a normal uterus, normal fallopian tubes and ovaries and are potentially fertile. The external gential anomalies can be easily surgically corrected. If left untreated the patient undergoes progressive virilization (Figure 3) since androgenic substances continue to be manufactured in the absence of the normal feedback action of cortisone on the pituitary.[1]

As is evident from Figure 1 a certain number of chromatin positive babies born with ambiguous genitalia do not suffer from congenital adrenal hyperplasia. In past years a number of virilized female newborns have been observed, whose mothers had received a progestational hormone during the first half of pregnancy.[2-4] Some of these compounds (17-ethinyl-testosterone, norethindrone-mestranol, etc.) have a virilizing effect on the fetus. The diagnosis of "iatrogenic female pseudohermaphroditism" is easily made if proper gestation history is taken. Unnecessary concerns and investigations can then be avoided. These babies are normal females and the phallic hypertrophy (sometimes with some labial fusion) is the only abnormality. Plastic correction, when necessary, is easy.

After exclusion of the two aforementioned conditions by appropriate means, two relatively rare anomalies remain to be considered. One is true hermaphroditism, an extremely rare disorder, and the other is "female pseudohermaphroditism of unknown origin." In general, true hermaphrodites are chromatin positive (indicating an XX sex chromosome complement).[5] By definition a true hermaphrodite possesses one testis and one ovary, or two ovotestes, or a combination of ovotestis with a testis or an ovary. In general, externally, the patient is an intersex.

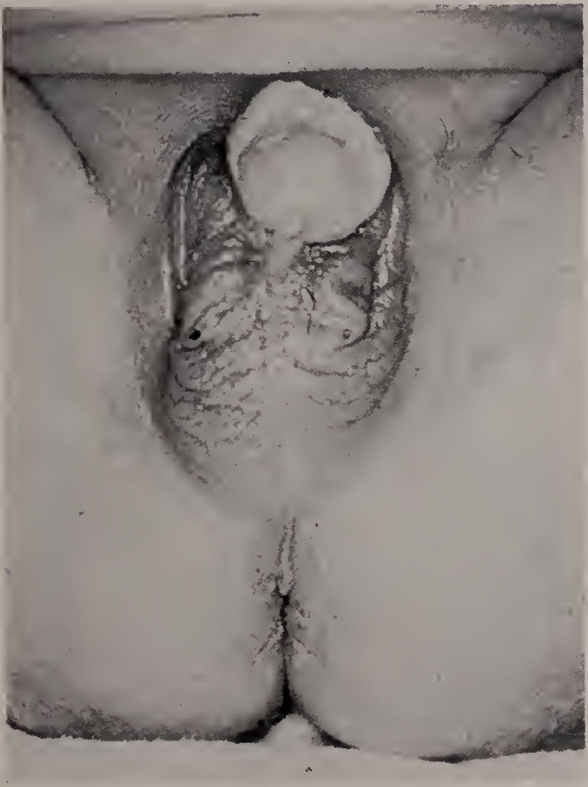

Fig. 2 External genitalia of a female newborn with a high degree of masculinization due to congenital adrenal hyperplasia. Note the peniform phallus and the complete fusion of labial tissue giving the appearance of an empty scrotum. Such a baby should not be mistaken for a male with hypospadias.

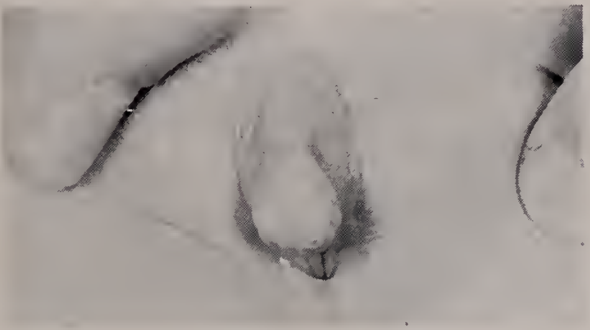

Fig. 3 External genitalia of a 27-month-old girl with congenital adrenal hyperplasia. In the absence of treatment virilization continued postnatally, as evidenced by the growth of pubic hair.

At puberty both gonads are activated and begin to manufacture male and female sex hormones; as a consequence, conflicting secondary sex characteristics make their appearance. To avoid such catastrophe it is mandatory to diagnose the condition early as possible and undertake the necessary surgical correction. As mentioned above, some patients will prove at laparotomy to have one kind of gonads only (ovaries), and therefore belong to a different category (female pseudohermaphroditism of unknown etiology). There is no way of differentiating them from true hermaphrodites, except by surgical exploration.

Whereas all female pseudohermaphrodites (with congenital adrenal hyperplasia, progestin induced, or of unknown etiology) should always be raised as females, a decision as to sex of rearing and anatomical correction has to be made in the case of the true hermaphrodite. The decision must be taken early, at least in infancy.[6] *In this respect the main element to consider is the appearance of the external genitalia.*[7] Only those patients with a marked degree of masculinization (i.e. an almost normal penis) should be raised as males, because it is impossible to construct a functional penis out of insufficient tissue.

True hermaphrodites with predominantly female external genitalia should always be brought up as females, regardless of the intra-abdominal findings. Corrections along the female lines (including vaginoplasty) can be done very successfully. The surgical exploration should be preceded by radiological examinations (urethrovaginogram and also an intravenous pyelogram) which will guide the surgeon. The structures of the sex opposite to that assigned to the patient (uterus and tubes, ovaries, or testes) are removed at laparotomy. so as to avoid the appearance of conflicting secondary sex characteristics at puberty. In the case of ovotestes, the removal of both gonads is usually necessary.

chromatin negative intersex

We shall now consider the case of the genitally ambiguious baby whose buccal smear reveals no Barr bodies (sex chromatin negative). This is a fairly large group. Associated anomalies such as malformations of the urinary tract or of skeleton and growth failure are common. This is also the group in which sex chromosome aberrations are most frequently found. Patients with XO/XY mosaicism (a term indicating the presence of two distinct cell populations in the patient's tissues, one XO cell line with 45 chromosomes and one XY cell line with 46 chromosomes) often present pseudohermaphroditic features.

Many other types of errors involving the sex chromosomes can also be seen, and anatomically speaking the sexual anomalies cover a wide spectrum ranging from an almost normal male appearance to an almost completely normal female one. Noteworthy is the fact that in general the finding of testicular tissue indicates the presence of cells with a Y chromosome. This rule apparently suffers few exceptions and illustrates the potent influence of the Y chromosome on gonadal differentiation. Figure 4 demonstrates the appearance of the external genitalia of an infant with XO/XY/XYY mosaicism.

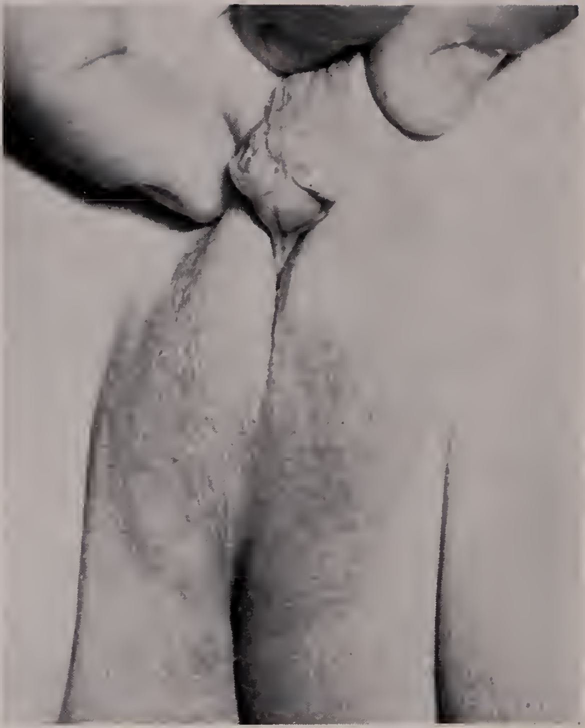
Fig. 4 Infant with ambiguous genitalia associated with a sex chromosome abnormality (XO/XY/XYY mosaicism). The left scrotum contained a testis (male pseudohermaphroditism).

The management of such patients is similar to that of true hermaphrodites: after completion of the radiological examinations (urethro-vaginogram, intravenous pyelogram), an exploratory laparotomy has to be performed and correction of the internal organs is carried out in accordance with the assigned sex. The latter is decided upon on the basis of the external apparatus. We emphasize again that penoplasty is never successful when there is insufficient tissue and that in many instances it is preferable to remove the testicular tissue and correct the external genitalia along female lines. In addition many of these patients need corrective surgery for urinary abnormalities or other malformations.

The syndrome of testicular feminization[8] is mentioned here because it is a form of male pseudohermaphroditism, although usually there is no, or very little, ambiguity of the external genitalia (sometimes a moderate clitoral enlargement). The disorder is familial, its inheritance probably autosomal dominant, sex-limited. Practically, the defect is transmitted by female carriers (phenotypically normal) to some of their male children (like a sex-linked disorder, hemophilia for instance). It should be suspected in "girls" who at birth or later are found to have inguinal "hernias." In some instances the existence of the disorder in the family is known and this facilitates the diagnosis. The inguinal "hernias" in fact contain well differentiated testicles.

The patients have a male chromosome constitution (XY), hence they are chromatin negative. The external genitalia have a normal female appearance, except for an occasional enlargement of the clitoris. The vagina is short however, and the uterus absent or very rudimentary. The gonads (testes) are either intra-abdominally located or outside of the inguinal ring, in the groins. A certain number of the patients are operated upon for these pseudo-hernias, which turn out to be testes.

At puberty the patients develop normal female breasts and remain very feminine in their general appearance. Sexual hair is very scant or absent and menstruation never occurs. It has been demonstrated that the testes in this condition produce normal amounts of testosterone and of estrogens, but the estrogens only appear to exert their influence (end organ insensitivity to testosterone),[9] and post-pubertal castration produces menopausal symptoms. The patients assume a perfectly feminine orientation, they are attractive and often marry (vaginoplasty is often necessary). There is no question that the infant with this disorder should always be raised as a female. The gonads should be removed after the age of 20 because of the high incidence of malignant transformation after this age. Substitutive therapy with estrogens is then indicated, to avoid menopausal symptoms.

conclusion

Regardless of its etiology, sexual ambiguity in a newborn child is always an important source of distress and a shocking blow to parents. The physician should be prepared to face considerable parental anxiety, outspoken or not, and be ready to meet repeated misinterpretations and questions with extreme patience. An enormous amount of work and time is necessary for proper management of most of these patients. It obviously requires the participation of representatives of several medical and biological disciplines. One physician however, must coordinate the efforts and assume responsibility for continuous care of the patient. ■

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abstracto

Un niño nacido con una alteración de intersexo siémpre presenta un problema serio de diagnóstico y de terapeútica. Hiperplasia congénita de la glándula suprarrenal, es una causa de intersexualidad importante y relativamente frecuente que se debe reconocer con prontitud, puesto que pone en peligro la vida del paciente. También representa uno de los errores de metabolismo de nacimiento el cuál puede ser tratado exitosamente. En el caso de pseudohermafroditismo inducido por drogas, preoccupaciones e investigaciones innecesarias se pueden prevenir si se obtiene una historia de gestación adecuada. En lo concerniente al verdadero hermafroditismo y pseudohermafroditismo masculino, el peligro está en tomar una decisión equivocada en lo que se refiere al sexo para criar y llevar a cabo correcciones quirúrgicas inapropiadas. Se recomienda enfaticamente que el grado de masculinización de los genitales externos (y no el sexo genético o gonadal) deba ser la consideración primaria que influya en la decisión. Finalmente se debe reconocer la existencia del síndrome de femenización testicular y cuidadosa atención se debe poner cuando se trata de mujeres jovenes que se presentan con "hernias" inguinales. La utilidad de la preparacón citologica de la mucosa bucal para determinar la cromatina sexual es evidente.

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Altitude Effects on the Human Body

Ultraviolet, Cold, and Low Pressure

Part II

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ultraviolet radiation

This section will discuss body reaction, individual tolerance, and acclimatization to UV.

Body response to UV. For the most part, ultraviolet radiation causes injury to cells at the body surface only, none of the radiation penetrating to the subcutaneous tissues. The rays ranging between 2800 and 3100 Angstrom, with the maximum effect at 2967A, are responsible for the destructive action on proteins or nucleic acid.

Erythema, blistering and desquamation of the skin may occur depending on the amount of exposure. The reaction usually begins several hours after exposure, reaching a maximum within 12 to 24 hours.

Chief effect on the eye is conjunctivitis accompanied by photophobia, lacrimation and smarting of the lids. The pupils are contracted and superficial ulceration of the cornea may occur. These symptoms appear several hours after exposure and reach a peak in about 6 to 12 hours depending on the dose. Since this entity usually occurs where snow is present reflecting the UV, it is commonly referred to as "snow blindness."

Individual tolerance to UV. Persons vary greatly in their reaction and sensitivity to ultraviolet. In addition, there is some variation in sensitivity of different parts of the body.

Blonds and rufous types are more susceptible than brunettes. Men are more reactive than women. Women have increased susceptibility during the first days of menstruation.

Over 60 drugs have a photosensitizing action,[33] at least a dozen of which sometimes find usefulness in expedition mountaineering. These are barbiturates, salicylates, diphenhydramine, prochlorperazine, promethazine, hexachlorophene, thiazide diuretics, quinine, riboflavin, procaine and procaine derivatives, sulfonamides, tetracycline, chlortetracycline and demethylchlortetracycline. If any of these drugs must be used, added protection against ultraviolet radiation must be instituted.

Synthetic antimalarial medications such as chloroquine, hydroxychloroquine and amodiaquin convey some reduction of photosensitivity. This may be an added benefit when these drugs are employed for malaria control during expeditions.[34]

Acclimatization to UV. Acclimatization consists initially of movement of pigment from the basal layer to the upper layers of the epidermis, causing tanning. With more prolonged exposure an actual increase in melanin formation occurs with deeper tanning.

The final reaction to the ultraviolet burn is a thickening of all layers of the epidermis. The tanning of the skin exerts some protection to further injury by ultraviolet radiation, but this is secondary to the skin thickening.

barometric pressure

While the lowered barometric pressure at altitude is commonly disregarded as a cause for altitude effects, a careful examination reveals that several problems occur directly as a result.

Body response to low pressure. The increased loss of body fluids at altitude with resulting dehydration is largely caused by the increased evaporation due to the low barometric pressure, to the exceedingly low moisture content of inspired air, and to the greatly increased, minute-volume ventilation. Table 3 compares sea level losses with those at altitude. There is a great variation in fluid loss in expired air because the minute-volume ventilation increases markedly with increases in altitude and work. At 20,000 ft. a resting ventilation of 12 liters per minute may rise to 60 liters per minute with difficult work. The slight polyuria of altitude quickly becomes oliguria with stress. Urinary excretion of 2,000 cc per day is dependent on adequate fluid inges-

Table 3—Daily Fluid Losses

Source	Sea Level	Altitude (Above 15,000 ft.)
Skin		
Insensible	500 cc.	750 - 1000 cc.
Perspiration	Variable	Variable
Expired Air	350 cc.	1000 - 4000 cc.
Urine	1500 cc.	2000 cc.
Feces	150 cc.	150 cc.
TOTAL	2500 cc.	3900 - 7150 cc.

tion. The amount of urine excreted provides a rough, but useful, guide as to the adequacy of intake while in the mountains.

In addition to general dehydration, local drying of mucosa in the nose and lips leads to the development of crusty sores. On Mt. McKinley (1962) members of our expedition suffered from abraded, bleeding lips even though frequently coated with protective creams.[35]

Drying of the tracheobronchial tree produces a chronic cough, ever-present among mountaineers at altitude.

With the evaporation increased heat loss occurs, contributing to the cooling problem. Spilling of liquid fuels on the hands can produce rapid frostbite at subfrigid altitude. This occurs because a liquid absorbs heat when evaporating. Since this heat is taken from the matter surrounding it, the liquid cools its surroundings as it changes into a gas.

There is a 50 per cent increase in the volume of trapped body gases when ascending from sea level to 10,000 ft. This increased volume must be either expelled or absorbed to avoid pressure problems. A classic example is the increasing pain on ascent in a recently filled tooth due to the expansion of a gas bubble. Expansion of gases in the middle ear and sinuses never create problems on ascent, but rarely a rapid descent can lead to a barotitis in a mountaineer. Expansion of gases in the gastrointestinal tract probably contributes to the loose stools early in the climb, before dehydration supervenes.

Since water boils at a much lower temperature at altitude, cooking dehydrated foods becomes more difficult and time consuming, often leading to the consumption of inadequately hydrated food.

Acclimatization to low pressure. No acclimatization occurs, nor is it necessary, for the low barometric pressure seen in mountaineering. However, an acute awareness of the problems and how to cope with them is essential.

partial pressure of oxygen

The major problems at altitude result from low partial pressure of oxygen in the inspired air, leading to low hemoglobin saturation. The progression from low barometric pressure to low hemoglobin saturation is illustrated in Table 4.

This section will discuss the major physiologic changes, their inter-relation, and acclimatization.

Body response to hypoxia. In healthy man the appearance and severity of the signs and symptoms of hypoxia depend upon the altitude, rate of ascent, duration at altitude, physical activity and individual tolerance. The symptoms can be divided primarily into cerebral and cardio-respiratory categories.

Cerebral. Although it is not commonly noticed in mountaineering, the first symptom of acute hypoxia is a loss of night vision, since the rods are extremely sensitive to lowered oxygen tension. This may occur at altitudes as low as 5,000 ft.[3]

Headache is a common symptom, frequently occipital in location. It may begin with exertion, disappearing at rest. Intensity ranges between little more than an annoyance up to an almost incapacitating ache, with nausea and vomiting. Lassitude often becomes a major problem. These symptoms are commonly referred to as acute mountain sickness.

Errors in judgement eventually yield to confusion. Hallucinations of auditory or visual nature, or both, may occur. In mountaineering, unconsciousness does not ordinarily supervene unless cardio-respiratory symptoms become prominent.

One of the members of our Mt. McKinley expedition[35] developed auditory hallucinations at the 18,000 ft. level during our descent. Two of us were returning from the summit to join the rest of our party at 16,700 ft. While descending he began conversing with voices of our party issuing from crevasses. He heard them laughing and

Table 4—Gaseous Tensions at Altitude

Altitude (feet)	Barometric Pressure (Mm of Hg)	Alveolar Water Vapor Tension	Barometric Pressure Minus Water Tension	Oxygen Tension Of Inspired Air (21%)	Alveolar Carbon Dioxide Tension	Alveolar (Also Arterial) Oxygen Tension	Hemoglobin Saturation* pH 7.4 37°C
0 (Sealevel)	760.0	47	713	150	40	110	98%
5,000	632.3	47	585	123	37	86	96%
10,000	522.6	47	476	100	34	66	93%
14,000 (Top of Continental U.S.)	446.4	47	399	84	31	53	87%
17,000	395.3	47	348	73	29	44	79%
20,000 (Top of North America)	349.1	47	302	63	28	35	67%
23,000 (Top of South America)	307.4	47	260	55	26	29	55%
26,000	269.8	47	223	47	24	23	41%
29,000 (Top of World)	236.0	47	189	40	24	16	25%

Assumed P_{CO_2} values (64)
* Calculated from O_2 dissociation curve on assumption that $Pa_{O_2} = PA_{O_2}$

whispering, and stated that they were hiding from us. He heard the hiss of our high altitude stove, which is interesting since we had not had water or food for 32 hours. His behavior was paranoid and very erratic, but not hostile.

During our descent from the summit (23,000 ft.) of Mt. Aconcagua (1965) one of our party developed the sensation of a ghost companion. He became confused as to where we were and what we were doing, began seeing living forms among the rocks, and finally saw two white-robed figures leading him to our high camp.

In both these instances the affected members appeared clear-headed after a night's sleep and re-hydration.

Cardio-respiratory. Palpitation, due largely to increased heart rate, is accompanied by dyspnea, which is predominantly exertional until very high altitudes are reached.

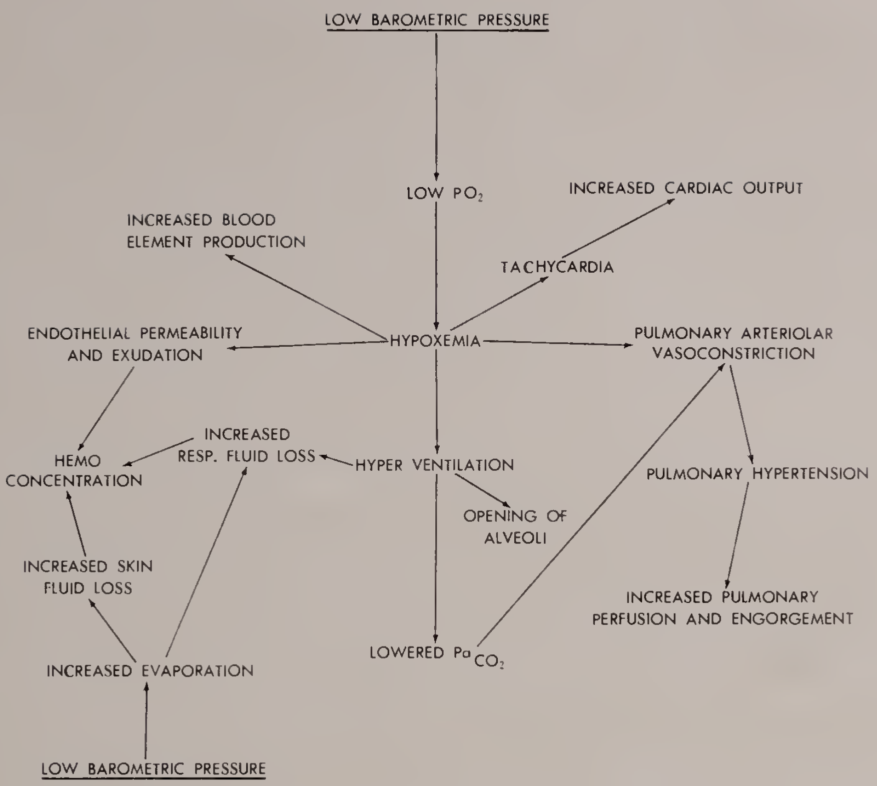
With hyperventilation, and decreasing carbon dioxide tension, periodic breathing (Cheyne-Stokes) occurs, usually at about 14,000 ft. or when the Pa_{O_2} level drops to 50 to 60 mm Hg. These annoying bouts occur primarily during exertion. However, at night when sleep depresses the sensitivity of the respiratory center to the carbon dioxide drive, periodic breathing may prevent sound sleep, wakefulness occuring during the hyperventilation phase.

Cyanosis of the lips and nail beds becomes evident during exertion, occuring when the hemoglobin saturation drops to about 75 per cent. This occurs at about 15,000 ft. There is considerable variation in detectability of cyanosis, depending on the skin color and thickness.

Cramp-like pains may occur in extremities where circulation is restricted, due to hypoxic muscle pain. On Mt. McKinley as we approached 15,000 ft, three of our members experienced pain and tingling, originating in the left shoulder and radiating down the left arm. Packs were removed and an exercise tolerance test performed without the packs. Dyspnea occurred without pain under these conditions, indicating that the cause was probably local muscle ischemia, probably trapezius, from our heavy packs.

Physical fatigue and exhaustion occur relatively quick with exertion due to inadequate oxygenation of tissues. Approaching 23,000 ft. without oxygen equipment on Mt. Aconcagua our party required 10 to 15 deep breaths after each step.

In most individuals the cardio-respiratory symtoms persist to some extent as altitude is in-



creased, but are ameliorated to a large degree by acclimatization. Under certain conditions, in certain individuals, the symptoms progress into acute, high-altitude, pulmonary edema.

A review of 410 cases of high altitude pulmonary edema reveals that the vulnerability altitude in the Himalayas began at 11,000 ft. compared to 12,000 ft. in the Peruvian Andes and 8,500 ft. in continental United States.[36] This difference may reflect the snow line, the temperature, or possibly the type of climbing involved. All the cases reported in the Andes occurred within 9 to 36 hours after arrival at high altitudes; of those in the Himalayas, 65 per cent occurred within 3 days, 25 per cent 4 to 10 days and 10 per cent 11 to 240 days.

The factors precipitating high altitude pulmonary edema seem to be rapid ascent with inadequate acclimatization, intense physical exertion, cold exposure, and individual predisposition. However, occasionally it is seen when none of these factors seem prominent.

Onset is characterized by an increasing intensity of the usual signs of acute mountain sickness —malaise, dyspnea, and dry cough—which progress to crepitant rales, wheezes, cyanosis, and pleural effusion. Death may ultimately result. A significant increase in temperature probably indicates secondary infection.

Acclimatization to Hypoxia. Man begins to acclimatize as soon as his body experiences the stresses of hypoxia. Consequently the initiating altitude depends to some degree on the amount of physical exertion attempted. Some of the body systems acclimatize in hours, while other systems require weeks or months to adapt. At least four to six months are required for maximum acclimatization of man. However, regardless of the duration, the sea level native never acquires the exercise tolerance of the high altitude native.

To be concluded
References will be carried in the concluding installment

Where Oregon is Today in Family Planning

JESSIE LAIRD BRODIE, M.D., Portland, Oregon

Oregon law provides control of advertising and sale of contraceptive products and sets standards for quality. The Planned Parenthood Association, the Oregon State Board of Health, and the Oregon State Welfare Commission have offered education and service to those making requests. In some cases materials are supplied. The Welfare Commission feels that cooperation of private physicians has been desultory.

Fifty years ago Margaret Sanger was arrested in Portland on an obscenity charge and spent the night in jail. Today we are discussing the How, the Who, and the Where to ensure birth control information, adequate medical facilities, and continuing contraceptive supplies to every medically indigent family in the state. The desirability of family planning is no longer controversial. Opinions differ only in regard to the method of fertility control and who shall provide the service.

Having graduated from a Portland high school the month of Margaret Sanger's unfortunate visit here, it was not surprising that I received my M.D. from the University of Oregon Medical School with absolutely no instruction on how to advise future patients in birth control methods. When our class, on the last day of our lectures in obstetrics and gynecology, asked the professor for such help, he blurted out while beating a hasty retreat. "If you'd look at the size of doctor's families you'd see that we don't know a damn thing about it."

legislation established

When a Portland women's group asked me in 1933 to help them start a family planning clinic, Mr. Clifford Zollinger, a Portland lawyer, advised us that Oregon's obscenity laws under which Margaret Sanger had been arrested in 1916 had not been clarified. The teaching of contraceptive techniques might still be interpreted as falling into the same category with exhibitionism, rape, and abortion. He followed with the very wise advice,—"It could be tested by presenting to the legislature a bill controlling the sale of contraceptives in Oregon. This would test how these old statutes will be construed before you get yourself into the same boat as your worthy national crusader."

With much excellent legal advice and the support of a number of influential state and city women's organizations, our present legislation for the control of the quality, advertising and sale of contraceptives was introduced and passed, in 1963, without a dissenting vote. A board of control was provided in the State Board of Pharmacy to function, with the advice of the State Board of Health.

Since then a physician practicing in Oregon has no restrictions on the prescription of any contraceptive device or medication. The Oregon Board of Pharmacy licenses retail and wholesale dealers who wish to stock contraceptives and evaluates the quality of contraceptive pharmaceuticals, rubber goods or other devices being offered in the state. In a 1965 summary of the birth control legislation throughout the U.S., Planned Parenthood-World Population classed Oregon and Idaho as the only two states having positive contraceptive legislation.

Before this law was passed, I was disturbed by the suggestive and offensive advertising displays in drug store windows and on counters. Gas stations sold condoms of questionable quality and rest rooms were fitted with condom-vending machines. The Oregon law on contraceptives has controlled and supervised contraceptive quality, advertising, and distribution through legitimate channels during more than 30 years, and has directed the patient to the doctor for advice.

the law is enforced

One company, becoming impatient with the slow percolation of information to the individual, has attempted to bypass the physician. Its advertising has run afoul of our contraceptive

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law. Although the Board of Pharmacy found its product up to standard, the company refuses to conform to the advertising standards of the state and this pharmaceutical is therefore barred from sale.

With such legislation governing quality, sale and advertising restrictions, we as physicians have only ourselves to blame if we have been slow to educate our patients and the public in recent scientific advances in contraceptives. It is only during the last two years that our medical students have received more training in this field than I did in 1928. We have only ourselves to blame if we find some of our colleagues handing out prescriptions for The Pill on request rather than giving the patient a pelvic examination and individualized advice.

Present policy of the American Medical Association was established at the 1964 Clinical Convention at Miami Beach (Board of Trustees Supplementary Report G, adopted by the House of Delegates). It stressed that family planning is more than responsible parenthood, it is a matter of responsible medical practice.

But a number of physicians still hesitate to take the *initiative* in introducing the subject of family planning to their patients. The obstetrician is the most likely to discuss it post partum but too often only when the woman herself introduces the subject. And such introduction has usually come from the more educated and well-to-do patient. So often has this been true that the old joke is current about the wealthy who do whatever they do—and the poor have children.

As physicians we claim that no one is deprived of medical care because of inability to pay. And without question, from pioneer days, if a patient could reach a doctor in our sparsely populated state he received the best medical care the doctor was able to give.

are doctors too busy?

But many things have changed this original picture all over the United States—and yes, even in Oregon.

First we must think of the changes in medicine itself, more intensive specialization, the high cost of practicing medicine and the constant pressure on each doctor to meet his day-to-day overhead, as well as the driving patient load. "I don't have time to counsel patients," a young doctor complained in a recent medical meeting, "I am in a group that is held to handling a specified patient load to meet our expenses and we must keep them moving. It is very time consuming to educate a patient adequately in birth control."

Patients commonly complain "I can't talk to my doctor—he is too busy," and further, "We know our doctor will take care of us in an emergency like a broken leg or another baby, even if we have no money, but would family planning be an emergency?"

Two years ago the Oregon State Welfare Commission, impressed with the spiral of poverty among their recipients, budgeted funds to provide family planning advice, a pelvic examination, and probably most important, continuing contraceptive supplies. Nurses and social workers in our various state agencies were directed to *initiate* discussion with families when they considered such advice indicated and to offer referral to the available facilities. They are instructed that fertility control is the *right* of every family, but that there must be freedom of choice of methods and no coercion.

The State Welfare Commission feels that the cooperation of doctors throughout the state has been desultory. The small fee, the time required for explanations, the subsequent phone calls, and the filling out of collection forms discourages optimal cooperation.

The low income patient often has low motivation, requiring frequent contact to ensure that she stays on the method and returns for her annual recheck. Some patients feel it is even too much trouble to go to the druggist for a monthly supply, or for those not on welfare when there is only enough money left for the pills or the baby's milk, of course the baby gets the milk. Most private physicians and their nurses are not equipped to "beat the bushes" as our family planning public health nurse described her work of motivating the hard to motivate, educating the less informed, and establishing follow-up of dropouts.

creation of demand

I am a hybrid, having been employed for ten years in my early pediatric career as a part time examining physician in the school division of the Portland Health Bureau and for thirty years having been a physician in private practice. The former was during the years of the intensive education and immunization drives for whooping cough, diphtheria and smallpox. The same stories were rampant then. The health departments were stealing the doctor's private patients. But after this intensive immunization educational campaign the private doctor has had generations of patients demanding the immunizations that the health department had advised. As one doctor expressed it, the health department is the elongated arm of the private physician.

Similarly the educational programs of the Planned Parenthood Association of Oregon, of the health departments that have already established the service, or of your community pressure groups—yes, and even the women's magazines and the daily press, are building up a similar demand for *family planning help* from the physician.

For thirty years the doctors of Oregon and the medical school clinics held out against the establishment of a planned parenthood clinic. In the early days Dean Dillehunt called me into his office several times and stressed the point that the physicians of Oregon were proud of the fact that they never refused to care for a patient because of inability to pay. "And besides," he always added, "we have the medical school clinic that takes care of any who need it."

And it was not until October 1964 that the Planned Parenthood Association of Oregon was formed and opened its clinic in downtown Portland with the approval of the Multnomah County Medical Society and later the State Association.

the educational program

The National Planned Parenthood Federation, as it has spread across the United States, has prided itself on its educational program, on the high caliber of its clinical facilities and on its research to develop a greater choice of dependable contraceptives. In our Portland clinic each woman receives a pelvic and breast examination, a Papanicolaou cytologic examination, explanation of the types of contraceptives available to her and instruction in the use of the method of her choice. She returns in a month for questioning, to see that she understands its use, and is then asked to report in six months. A year later the Papanicolaou and pelvic examination are repeated. If the patient fails to return, a follow-up letter is sent and if possible a home visit is made.

In addition to being a provider of clinical facilities, the Planned Parenthood Association of Oregon is basically educational. A speaker's bureau, a reference library, pamphlets geared to all educational levels, a good publicity and public relations committee and, of course, "gossipology" from patient to prospective patient all educate the general public. Patients are instructed in groups or individually to increase their motivation and feeling of security in the method they choose. Classes for the student nurses are given in the hospitals in the Portland area and our clinic serves as a source of instruction for physicians and their nurses wishing to brush up on contraceptive techniques, such as insertion of the intrauterine device.

We hold briefing sessions for Peace Corps groups preparing for foreign service, for Vista workers in the migrant camps, and for sociology classes from some of the Portland colleges. Several of our medical school faculty are members of our Medical Advisory Committee. They report a decided upgrading of both undergraduate medical education and continuing medical education in the family planning and sex education field in the last two years.

new facilities

The Planned Parenthood Association of Oregon outgrew its borrowed clinic facilities on the west side of Portland in January 1966 and moved to 620 N.E. Broadway. We hold three clinic sessions there weekly and have seen, to date, 1178 new patients, the majority of whom we carry as a continuing patient load.

On August 15, 1966, we received a grant from the Office of Economic Opportunity to open a clinic in the Albina Neighborhood Service Center and during these four months we have given contraceptive help to 68 new patients there. This is in the same area where Carl Ashley, Director of the Maternal and Child Health Division of the Oregon State Board of Health, has established the High Risk Pregnancy Program under Richard Franklin. The large percentage of unwed mothers and Aid to Dependent Children recipients here requires an intensive contraceptive program and follow-up to avoid repeaters. We are pleased to have been asked to cooperate in this program.

As a state Planned Parenthood organization we have found that a clinic in Portland, the major metropolitan area, is a long way from most of the rest of the state. This week I received a letter from Klamath Falls asking for the address of the Planned Parenthood Clinic nearest to the writer. She says, "I was given your address when

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Dr. Brodie is physician administrator of the Planned Parenthood Association of Oregon.

I moved from Los Angeles, where I had been getting contraceptive help. But Portland seems such a long way from Klamath Falls." (It's 260 miles. Ed.) One of our tasks of the last year has been to see *how* and *by whom* family planning service can be made available, not just to the people around Portland but in every part of the state.

By using a formula based on population and percentage of medically indigent families in the area, it is estimated that there are in the United States five million fertile non-pregnant women in the childbearing age. The 400 Planned Parenthood clinics in the United States examined, last year, 260,000 patients. Various government supported facilities provided care for 240,000 more. This gives us 500,000 or 10 per cent, who are being cared for out of a potential five million.

not enough

But let us come down to our own state. By this same formula Oregon has 43,570 medically indigent, fertile non-pregnant women. Our two Planned Parenthood clinics have seen 1,246 patients—less than 3 per cent of the total. Have the private doctors or the County Health Departments cared for the other 97 per cent? Our Aid to Dependent Children tax load makes this look doubtful. Every facility is going to be needed, the private doctor, the Planned Parenthood Clinic, and a family planning service in every county health department.

Following the excellent publicity on the recent opening of the Family Planning Clinic in the Multnomah County Health Department, we were asked how we liked the competition. Even the officers of the Multnomah County Medical Society were hesitant to give Dr. Donnelly their approval until they were sure that he was not running in competition to our already existing clinic. We are delighted with the facilities and service and have given our encouragement and advice at every step of the project. In fact it was by our suggestion that two of their nurses were given the opportunity to spend a month of preparatory study at the Family Planning Seminar in New York last year.

In 1966 our Association sent a questionnaire to every doctor in Oregon, asking among other things where they would like to see the medically indigent patient obtain family planning. And believe it or not, 69 per cent of those answering in the state at large wished such a clinic in the hands of the county health department. And 70 per cent of the Portland doctors answering named the County Health Department as their first choice. Their reasons? As private physicians they lack time for other than the medically indigent of their own practice and realize the necessity of an educational and motivating program.

One doctor wrote: "We do not need a clinic in this community at this time. The medical facilities are readily available. The majority of women in this community who have had a baby have had opportunity for contraceptive advice at the post partum exam from their physician—whether indigent or not. Educating the public and motivating them to seek contraception is the real need." But how, by whom, and when?

summary

1. We have excellent supportive legislation for the doctor, for the pharmaceutical industry, for the Welfare Commission.

2. Private physicians are accepting the challenge that family planning is not only responsible parenthood but responsible medical practice. But, often time is lacking for educating, motivating, and giving professional family planning care to patients outside their immediate practice.

3. The physicians of the state are 70 per cent in favor of the County Health Department providing family planning services for medical indigents.

4. Three patterns are dominant throughout the state:

   a. A family planning clinic staffed by the Health Officer or by a specialist in obstetrics and gynecology hired by the Health Department on a part time basis.

   b. A family planning service integrated into the other health services of the County Health Department and staffed by Health Department personnel.

   c. Educational and referral services from the Health Department to a roster of local physicians.

5. A cooperative local Planned Parenthood Association composed of dedicated volunteer workers often helps the educational program and where necessary develops better public relations with the local community, the medical association, and the county commissioners.

6. Every county, no matter how large or small, must attack the problem in a way to fit its individual needs. ■

620 N.E. Broadway (97232)

Adjuvant Irradiation Treatment for Ovarian Carcinoma

CLIFFORD V. ALLEN, M.D., Portland, Oregon

Five year survival rate for stage I and II ovarian carcinoma was approximately doubled by use of intra-abdominal radioactive isotopes after surgery. A few of the more advanced cases were also salvaged. It has been possible to convert inoperable cases to a condition permitting operation by using the same technique. Collodial radioactive phosphorus was used in most cases.

The 1966 American Cancer Society estimate of deaths for carcinoma of the ovary in the United States is 8,900 and for cervix 9,900. Deaths from malignancies of the uterus decreased from 27 per hundred thousand in 1930 to 12 per hundred thousand in 1963, but those for ovarian carcinoma increased from 4 to 8 per hundred thousand.[1]

Surgical treatment only. Surgery is the keystone in treating ovarian malignancies, but surgery alone leaves much to be desired. In the Cancer Prognosis Manual of the Cancer Society an analysis of 2,063 cases showed a five year yield of only 35 per cent.[2] Corscadan found a variation of 6 per cent to 60 per cent in his review of the literature in 1956.[3] Evans reported, in 1952, from the British Columbia Cancer Institute, five year survival of not more than 35 per cent in early operable cases.[4]

Surgery plus external irradiation. The addition of external irradiation postoperatively has been of questionable benefit. Representative results of surgery alone versus surgery and postoperative radiation are shown in Table I.

The staging of Muller[9] is used, with the exception of placing in State II cases that rupture at surgery with peritoneal contamination.

historical background

The cure rate for Stage I ovarian carcinoma at the University of Iowa in 1949 was 52 per cent.[10] Keettel, Elkins and their group did peritoneal washings in ten successive Stage I and IIa cases and found cancer cells in five—the per cent of cases they had been losing. Since these were microscopic cells it was reasoned that very little penetration would be necessary to destroy them if they were radiosensitive. Therefore, they began to use radioactive colloids ^{198}Au intraperitoneally, postoperatively, in all non-advanced cases, with marked improvement in control rate. Prior to his death, Elkins stimulated interest in this method at many centers throughout the world and results began appearing in the literature in 1960.

Staging of Ovarian Carcinoma

I. Unilateral—without adhesions or metastases.
II. Tumors adherent, bilateral, ruptured before or during operation, and metastases limited to the pelvis.
III. Same as above, with additional metastases within the greater abdominal cavity, not exceeding 2.5cm in diameter.
IV. All other cases of ovarian carcinoma.

Another bit of historical background is that the early use of radioactive colloids intraperitoneally was for control of ascites, a palliative measure. After a large number had been so treated it became obvious that some with massive intra-abdominal tumors benefitted by their marked reduction or even disappearance. This bit of serendipity remains unexplained. Rose, at the M.D. Anderson Hospital, treated nine patients with massive abdominal carcinoma who did not have effusion and one is alive at 67 months.[11] Ariel reports a patient with solid, caked omentum and extensive peritoneal metastases treated with radioactive colloids.[12] At laparotomy 13 months later there was no sign

Table 1 Survival rates, surgery and surgery plus radiation

		Surgery only per cent	Surgery plus postoperative irradiation per cent
Roswell Park Hospital[5]	Stage I	75	56
Raventos[6]	Stage I & II	69	57
Holme[7]	Stage I	59	60
Holme[8]	Stage II	46	48
Kerr	Stage I		48

Table 2 Plan of treatment

Stage I. Postoperative intraperitoneal radioactive colloids.

Stage II and III—Postoperative intraperitoneal radioactive colloids. Metastases 0.5cm. or larger—4000R external irradiation to the pelvis started after an interval of 3 or 4 times the half-life of the isotope.

Unresectable Stage III and IV—Radioactive colloids followed after an interval of 3 or 4 times the half-lives of the isotope by 4000R to the bulk of the tumor. Field size decreased as the tumor shrinks. Surgery if possible after six weeks.

Iowa Criteria

Stage I Surgical removal of all the primary tumor imprint (intact ovarian mass).

Stage IIA Spill of malignant cells into peritoneal cavity at operation.

Stage IIB Total removal of the primary tumor but questionable metastases left in pelvis.

Stage III Recurrence of malignant tumor following either operation or irradiation.

Stage IV Inoperable tumor; exploratory or paracentesis only, distant metastases.

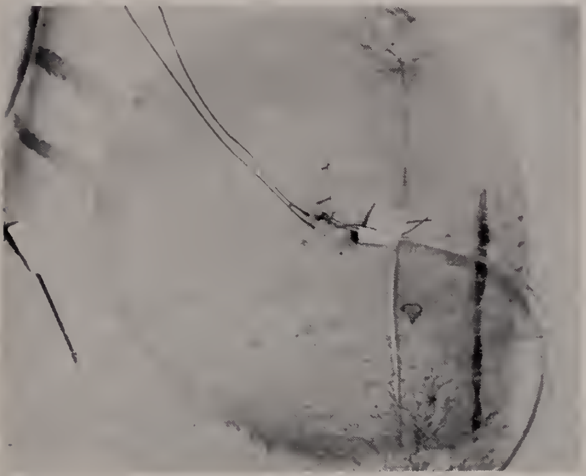

Figure 1
0.67" diameter polyethylene tubing inserted into peritoneal cavity with surrounding purse string suture.

of tumor. The patient is alive and well four years later. I have had similar experiences.

On the basis of a few cases treated in Portland as early as 1956 and the early outside reports regarding response of ovarian carcinomas to radioactive colloids, the staff at the University of Oregon Medical School has adopted a policy of routine treatment postoperatively. Inoperable cases are treated with the expectation that operation will be possible later. With modification of the plan, current routine is outlined in Table 2.

results of combined treatment

Reports have appeared from many centers throughout the world showing improvement in results when following essentially this plan of management. The M.D. Anderson Hospital reports 18 to 24 cases with peritoneal contamination alive and well up to 76 months. The Mayo Clinic reports 71 per cent of their Stage II cases alive and well at five years in a series of 118 cases.[13] Mueller also, with 118 cases and five year followup, reports 100 per cent survival of Stage I, 72 per cent Stage II and 22 per cent Stage III.[9] The Iowa group reports on 360 cases with five year followup—Stage I 90 per cent, Stage IIa 76 per cent, Stage IIb 39 per cent, and Stage III 15 per cent.[14]

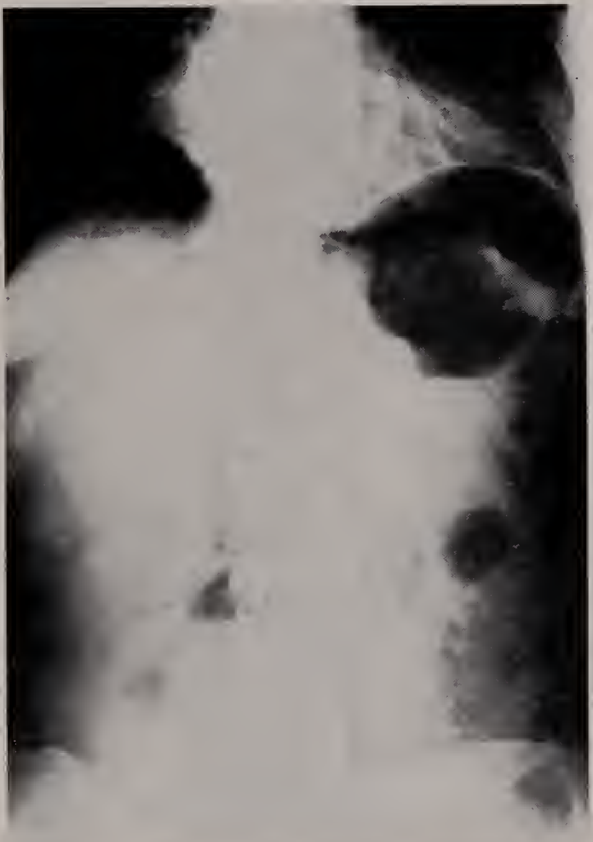

Figure 2
Upright AP x-ray of abdomen after intraperitoneal air injection. Free air beneath both leaves of the diaphragm.

My series is small and my longest followup is nine years with most of the cases having been treated since 1961. I have a total of 35 cases, most which were serious cystadenocarcinomas. The cell types were as shown in Table 3.

There were 12 deaths. Five occurred within 6 months and the others between 10 and 18

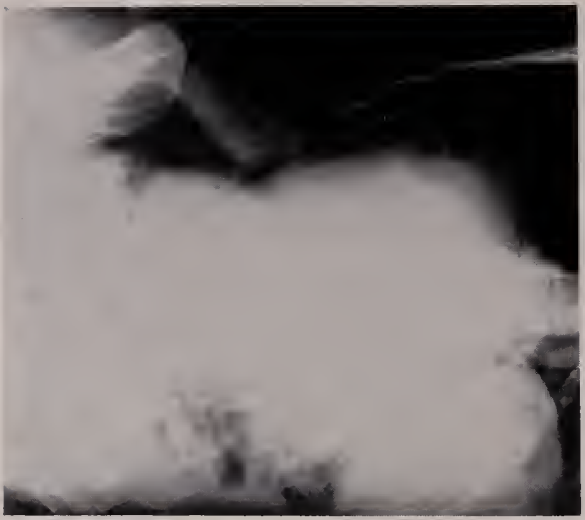

Figure 3
Left lateral decubitus x-ray again demonstrating non-loculated air.

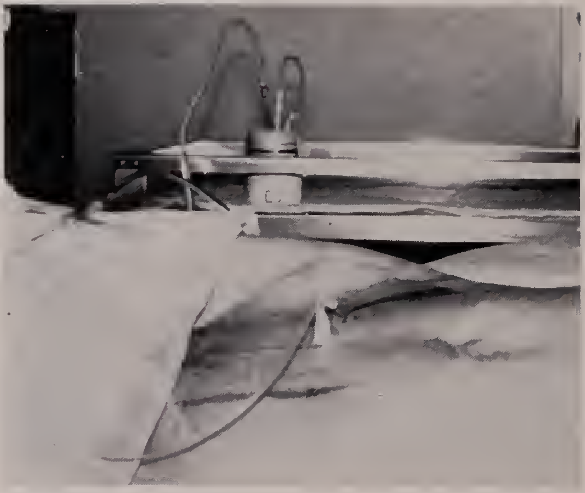

Figure 4
Closed system connecting radio-active chromic phosphate (P-32) container to intraperitoneal tubing.

Table 3 Pathologic diagnoses, 35 cases treated by intra-abdonimal isotopes.

Serous cystadenocarcinomas	21
Pseudomucinous serous cystadenocarcinoma	4
Granulosa cell	3
Mesonephroma	3
Mixed serous and mucinous	1
Undifferentiated	1
Adenocarcinoma	1
Dysgerminoma	1

Table 4 Tumor free survivals

State I	5 of 5
Stage II	15 of 18
Stage III	2 of 4
Stage IV	1 of 8

months. Thirteen had bilateral involvement. The youngest patient was sixteen and the oldest eighty-five. The majority of patients were between forty and sixty years of age. Tumor-free survival rates so far are shown in Table 4.

Most striking benefit, of course, has been in the Stage I and II groups where there has been an improvement from approximately 50 per cent survival to 90 per cent or more in the Stage I cases and from about 23 per cent to 78 per cent in Stage II. An occasional Stage III or IV case can be salvaged. When the patient has extensive tumor that cannot be removed I advocate biopsy only, followed by radioactive colloids or external irradiation, or both, tailored to the case

Figure 5
Scintiscan of abdomen after isotope injection—excellent distribution of isotope.

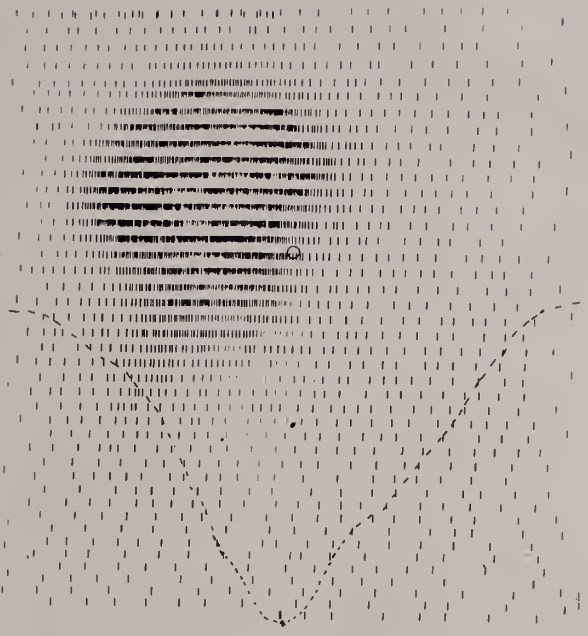

Figure 6
Scintiscan showing localized collection of isotope—unsatisfactory distribution.

and a followup period of observation, then surgery if possible. I agree with Kottmeier's philosophy that partial removal of the tumor is harmful:

> At the University Clinic at Stockholm a gynecologist who is a professor there used to treat the patients very carefully, in close cooperation with us at Radiuhemmet. Including every case in his overall five year cure rate in patients with Stage III disease was about 26%. Then a new professor came who thought you should operate on everything, out with the tumor as soon as possible, and out with as much as possible, and then treat the patient. His five year cure rate in the same series was not quite 5%.[15]

Of three patients who had incomplete resection followed by radiation therapy, two are dead at 4 and 10 months and one is alive with disease at 15 months.

A patient seen in March, 1963, illustrates how advanced cases can be salvaged by utilizing radioactive colloids for conversion to operable condition. In January she had a laparotomy for bilaterial ovarian carcinoma with extensive mesenteric and parietal metastases. As the masses were too large for removal, only biopsy was done. She was given radioactive gold followed by external radiation. A few months later she had a second laparotomy. There were no metastases and the left ovary was atrophic. The right ovary was removed. It contained papillary serous cystadenocarcinoma completely removed. In August, 1964, there was a questionable recurrence. At a third laparotomy no evidence of tumor was found. This patient is alive and well, without evidence of disease, over three years yater.

From five cases considered unresectable at the time of first laparotomy, three were converted to resectable condition. One is alive without disease at over three years. Another had good palliation for 14 months and a third died at 10 months with questionable benefit from treatment. The other two were dead 2 months following irradiation. Possibly they were poorly chosen for treatment.

technical considerations

In placing the isotope it is important that the material be injected into the free peritoneal cavity and not into the abdominal wall or intraabdominal structures. I feel this is best accomplished by introducing a polyethylene tube with an outside diameter of 0.67 inch through a 13 gauge trochar. It should be introduced for a minimum of 12 inches, shortly before injection of the isotope. After the tubing is introduced I inject 200cc of air into the peritoneal cavity and have radiographs taken with the patient in the upright and both lateral decubitus positions. This demonstrates presence or absence of loculation and confirms proper placement of the tube. After satisfactory placement is demonstrated, the radioactive colloid is injected with approximately 125cc of saline. The purse string suture is tightened, the tube withdrawn, and the patient turned from side to side, in the horizontal position, every ten minutes for a period of two hours, to promote proper distribution of the isotope. Scintiscans are made to demonstrate distribution of the isotope. If there is heavier radiation from the isotope on one side of the pelvis than the other, the external irradiation is adjusted to equalize the distribution to both sides of the pelvis. The external radiation is easily tailored depending upon the distribution of the isotope. I feel it is important to give the isotope before external radiation because when external radiation is given first, both sides of the pelvis receive the same amount. Then if the isotope is given and pools on one side, this side will receive an excessive amount of radiation while the other will be undertreated.

I feel there is a great hazard in introducing the isotope through a needle. Bowel wall injuries have been reported. The needle can be retracted or advanced too deeply, placing the isotope in the abdominal wall or retroperitoneal areas. The only complication I have observed was in a patient in which a large quantity of the isotope was deposited retroperitoneally. The patient subsequently developed necrosis of bowel and iliac artery rupture. If radioactive gold is used, patients may have some cramping and diarrhea. They usually complain of some pain during the introduction of the gold. These symptoms have not occurred, in my experience, with colloidal radioactive phosphorus. Several authors have pointed out, and I have observed, that frequently these patients may be without tumor but will have a bogginess or fullness in the cul de sac up to eighteen months following the use of radioactive colloids. It is difficult in many situations to differentiate between tumor and this form of radiation reaction locally.

summary

From the preliminary reports and my experience it appears that the five year survival rate of patients with Stage I and II carcinoma of the ovary can be approximately doubled with the use of postoperative radioactive colloids. Some of the more advanced cases can be converted from inoperable to operable situations with the use of preoperative radioactive colloids or external irradiation, or both. ■

3181 SW Sam Jackson Park Road (97201)

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abstracto

La supervivencia postoperatoria de cinco años para el carcinoma de ovario en los estadios I y II, fue aproximadamente doblada con el uso de isótopos radioactivos intraabdominales despues de la intervención. Unos pocos de los casos mas avanzados fueron asimismo salvados. Ha sido posible usando la misma técnica pasar casos inoperables a una condicion que permita la operacion. En la mayoria de los casos se usó ^{198} *Au. coloidal.*

Problems in the Diagnosis of Tuberculosis

RAYMOND G. ROWBERG, M.D., Spokane, Washington

Records of 1,028 patients admitted to a tuberculosis hospital were studied. Active tuberculosis was found in 525 patients, inactive tuberculosis or other pulmonary disease was found in 503. Slightly more than two-thirds of the active cases had positive smear, or positive culture, or both. Negative reports on smears were found to merit little confidence.

Diagnosis of tuberculosis remains a difficult task. Newer methods of sputum collection, refinements in the staining of the specimens, and improvements in microscopy have reduced but not eliminated this problem. The changing profile of tuberculosis in today's population includes the emergence of resistant bacteria, the finding of variant types, and the breakdown of old treated tuberculosis to an insidious, barely recognizable process. In spite of these changes, the search for bacteria from a suspected patient remains a major area of concern.

In this paper attempt will be made to suggest answers to four significant questions.

1. *How many smears (of sputum or gastric washes) must be examined before one can say that the patient is negative? (By negative is meant the absence of acid fast bacteria from the pulmonary tree).*

Slides of 1,028 admitted patients were reviewed. Approximately 12,000 slides were reported in this series. These were nearly consecutive admissions to Edgecliff, the Spokane County Tuberculosis Hospital, in Spokane, Washington. Smears were examined by registered technicians—two of whom examined about 75 per cent of all the slides. Table 1 summarizes the findings.

Eighty-one cases were positive on smear only, negative on culture. They are included in the first four groups.

Active tuberculosis was found in 525 patients, the diagnosis being based on positive smears or cultures in 364 and on clinical evidence in 161. Inactive tuberculosis or pulmonary disease other than tuberculosis was diagnosed in 503. Of the patients with positive smears, 260 (71.4 per cent) were found on the first four smears. Fifty-five (15.1 per cent) had positives on smears after the first four and 49 (13.5 per cent) had positive cultures but negative smears.

Table 1
Laboratory report, smears from 1,028 admitted patients

Group		Patients
I	Positive, first slide	213
II	Positive after 1 to 3 negatives	47
III	Positive after 4 to 7 negatives	27
IV	Positive after 8 or more negatives	28
V	Negative all smears, positive culture	49
VI	Negative during hospital stay	664
	Total	1,028

Slightly more than two-thirds (69.3 per cent) of the active cases in the entire series were picked up on smear or culture. Clinical indications were relied upon for diagnosis of the other third (30.7 per cent). Only 49.5 per cent were picked up with four or fewer smears. This percentage could be higher if the average admission age were lower. A young patient usually has a more exudative disease whereas the older one—especially in relapse—has more fibrosis. The patient who uses a county clinic may develop an insidiously progressive disease by not following the recommended home treatment and in these cases bacteria are difficult to find. A diagnosis of clinically active pulmonary tuberculosis with negative smears and culture is based on the clinical appearance on admission, a study of contacts, skin tests, known previous infections in the same patient, and the response of a lesion to appropriate therapy.

On the basis of the above, one could answer question 1 by saying that 4 sputum examinations (or gastrics) will find approximately half of the active cases, but 8 will not be enough

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(Part of the above studies were financed by a grant from the Spokane County Tuberculosis League.)

in some cases (and in some of these one cannot demand a bacteriological diagnosis).

2. *How often does a positive smear occur after one or more series of monthly negatives?*

The 1,028 admissions were studied for an extended period. Each patient had a monthly series of 4 sputum smears and 3 cultures. Sixty-one patients had a positive slide after negatives in one monthly series. Twenty-four had a positive slide after negatives for two months and twenty had a positive after three or more negative months. Patients do not understand the occurrence of a positive after a long period of negatives and sometimes make uncomplimentary remarks about it.

Table 2
Positive after negative series

Months Negative		Number of Patients
1		61
2		24
3 or more		20
	Total	105

3. *How often are all smears negative, but cultures found to be positive, and vice versa?*

Only 49 were positive on culture when all smears were negative and 81 were negative on culture although positive on smear. Both smear and culture were positive in 234.

4. *What is the variation among technicians in reporting a series of slides?*

The last question involves the human error creeping into the scanning of slides. Table 3 shows the results reported by four laboratories after examining ten slides first selected by Lab E. At the end of all the examinations Lab E re-examined the slides charted under Lab E2. This was done to try to evaluate the danger of bacteria being washed off with the xylol used to wash off the oil between examinations. Slide 7, 8, and 9 suggest wash off may occur, but too few slides are included to be significant.

In talking to various technicians it was found that they varied the time spent on a slide before calling it negative. Some spent as little as 12 minutes and others up to 1 hour. It appears that in using carbol fuchsin stain and light microscopy one has to accept a significant error when a single slide is reported as negative.

Table 3. Report on smears by various laboratories

Slide No.	Lab E	Lab A	Lab B	Lab C		Lab D	Lab E2
				1	2		
1	—	—	—	—	—	—	—
2	+	+	+	—	+	+	+
3	+	+	+	—	—	+	+
4	—	+	—	—	—	—	—
5	—	—	—	+	+	—	—
6	+	+	+	—	+	—	+
7	+	+	—	+	+	+	—
8	+	+	—	—	—	—	—
9	+	—	—	—	—	—	—
10	+	+	+	+	+	+	+

Slide 1 was a known normal control. Slide 4 and 5 were from patients presumed negative by clinical and laboratory examination. Slide 10 was highly positive. Slides remaining were from patients with previous positive sputum, but only a few bacteria were found on these slides.

Proper accomplishment of this test is difficult. It must be assumed that varying numbers of organisms are present in sputum from day to day. Therefore, a negative report has little significance in excluding disease. It is much less significant than a laboratory report of normal findings when considering most other conditions. ■

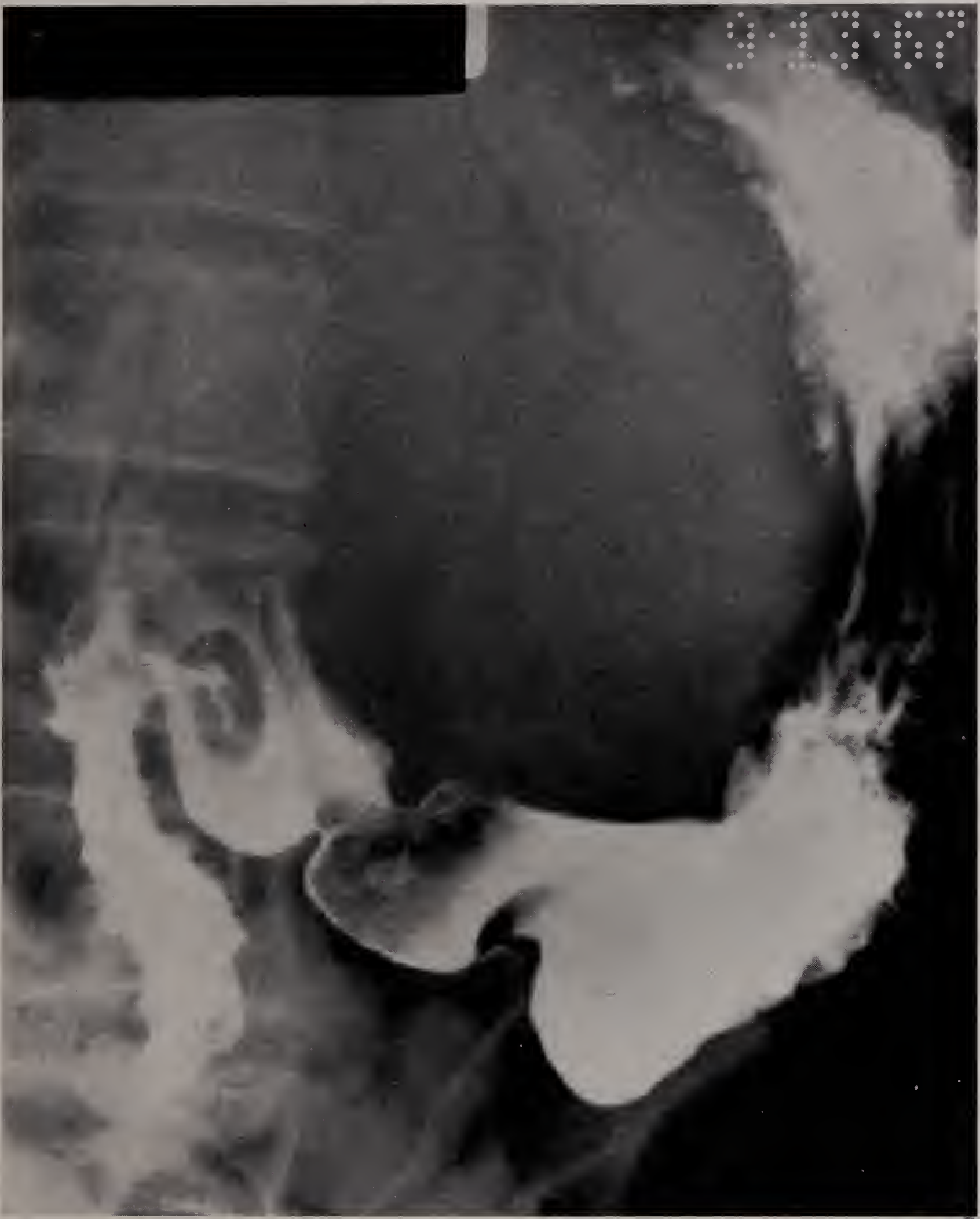
E 9822 Sprague Avenue (99206)

abstracto

Los datos de 1,028 pacientes admitidos a un hospital para tuberculosos fueron estudiados. Se descubrió tuberculosis activa en 525 pacientes, y en 503 pacientes se descubrió tuberculosis inactiva u otra enfermedad pulmonar. Un poco mas de las dos terceras partes de los casos activos tuvieron citología positiva, a cultivo positivo o los dos. Se reconoció que los resultados citológicos negativos ameritaban poca confianza.

X-Ray of the Month

SUBMITTED BY WASHINGTON STATE RADIOLOGICAL SOCIETY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An automobile accident resulting in blunt abdominal trauma from the steering wheel caused severe abdominal pain in this 40-year-old woman. The pain subsided, but recurred and increased with a fluctuating course over the next month. On admission, increasing abdominal pain and an enlarging epigastric mass noted for one week were the presenting complaints. Hct, 35 per cent. WBC, 6750. Bilirubin, normal. BUN, normal. Physical findings were limited to the moderately tender mass.

continued on page 1048

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X-Ray of the Month on Page 1047

Diagnosis: *Pancreatic Pseudocyst.* The UGI examination confirmed the presence of a mass and provided a clue to the pancreatic origin in that the gastric displacement was from the posterior primarily.

Epigastric and left upper quadrant pain is noted by most patients with pseudocyst. Other nonspecific symptoms such as nausea, vomiting, and so forth may be associated. Upper GI examination shows evidence of a mass in about 80 per cent of the cases. Less than 50 per cent have abnormal amylase.

Pancreatitis is the underlying cause of pseudocyst formation. Two reported series have implicated trauma in the etiology in 11-15 per cent with the remainder being due to acute or chronic pancreatitis.

The differential diagnosis included carcinoma of the pancreas, retroperitoneal lymphoma and other retroperitoneal neoplasms. With a history of trauma, hepatic, splenic and retroperitoneal hematomas must also be considered.

Although some pseudocysts gradually regress, surgical treatment is indicated to avoid the complications of rupture, obstructive phenomena, hemorrhage, as well as pleural effusions and basilar pneumonia. Internal drainage by transgastric cystogastrostomy is the current therapeutic preference.

GENERAL NEWS

Future seminar courses held in Oregon

Future courses to be held by the University of Oregon Medical School are:

Seminar Courses

Cancer—January 19, 1968. Co-sponsor: Multnomah County Cancer Society.

Common Dermatologic Problems—February 2-3, 1968.

Management of the Dying Patient (Psychiatry) — February 22-24, 1968.

Symposium on Sex Steroid Supplements (Obstetrics-Gynecology)—March 9, 1968 (tentative).

Complications of Common Surgical Problems — March 14-15, 1968.

The Rational Therapy and Control of Tuberculosis —March 27-29, 1968. Co-sponsor: Oregon Thoracic Society.

Epilepsy—April 4-6, 1968.

UOMS Alumni Association Annual Scientific Meeting and Sommer Memorial Lectures—April 24-26, 1968.

Basic Roentgenology of the Skull, Spine and Extremities—May 16-17, 1968.

Circuit Courses

Shock—Bend, Oregon, November 6, 1967.

Acute Myocardial Infarction—Coos Bay and Corvallis, Oregon, December 6-7, 1967.

Cancer of the Colon — Coos Bay and Corvallis, Spring, 1968 (tentative).

Acute Myocardial Infarction — Ontario and Bend, Oregon, Spring, 1968 (tentative).

New Field Director For Volunteer Physicians in Viet Nam

Lawrence A. Smookler, San Francisco, Calif., is the new Field Director of the American Medical Association's Volunteer Physicians for Viet Nam program.

He replaced Malcolm E. Phelps, El Reno, Okla., September 1. Dr. Phelps is the newly-elected vice-president of the AMA.

As Field Director, it will be Dr. Smookler's job to coordinate the volunteer physician program with health care needs of the Vietnamese civilian population.

AMA administers the program, under contract, for the United States Agency for International Development (AID). It is part of the overall program of U.S. medical assistance to South Viet Nam, started in July, 1965, in response to a plea from the South Vietnamese government.

More than 300 physicians have participated since the program's inception.

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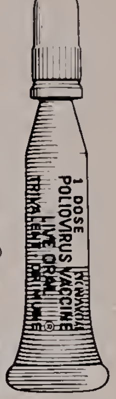

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SIDE EFFECTS of significance have not been reported. However, the risk of vaccine-induced poliomyelitis, estimated to be from 1:2,500,000 to 1:50,000,000 should be considered.

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Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.

Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.

Use with caution in pregnant patients, since the drug may cross the placental barrier and adverse reactions which may occur in the adult (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.

Precautions: Antihypertensive therapy with Hygroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.

Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Hygroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.

Take special care in cirrhosis or severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.

Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, hyperuricemia, headache, muscle cramps, orthostatic hypotension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.

Average Dosage: One tablet with breakfast daily or every other day.

Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000. (B)46-230-D

For full details, please see the complete prescribing information.

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York

Here's the Hygroton
they don't
have to halve

New Hygroton 50 mg.
from Geigy

to go with
the Hygroton 100 mg.
you know

HY-5406

Trivialis et Jovialis

Science of the Stall

RICHARD F. MORTON, M.D., Kennewick, Washington

The telephone rings. Less than half awake you grope inaccurately toward the source of the insistent clamor. You're awake by the time the receiver is clamped to your ear. You hear a familiar voice, controlled perhaps at the expenditure of some great effort, but charged with readily perceived tension. . . "This is Max. I'm in the delivery room with a girl who seems to be having some trouble. She's been held up for quite some time. I don't seem to be able to get a real good application. I've even taken an x-ray, and it showed a face, or a brow, or a posterior . . . or something. I don't want to bother you. I'm sure it's only a simple matter. . . Why don't you come down and take a look."

After telling Max to sit tight, and assuring him you'll be right down, you linger on the edge of the bed a few minutes, considering that masterpiece of understatement and your sympathy for Max unhappily involved in a midnight drama that probably isn't half as serious as he thinks it is. You dress slowly, stalling deliberately. Why? This is where time is working for you. The only real advantage the consultant has over the general man is seeing the disease somewhat later in its natural course. Surprising what a difference it makes. Look what it does for the internist. The successful internist has his referral appointments all booked up for at least two months, so he can make a diagnosis of multiple sclerosis, whereas three months previously the dumb LMD missed the fact that she had one episode of flutter of the eyelid.

By astute management of time, you can apply the same principle to the problems people seem to have in the delivery room. Delay. Stall for twenty to thirty minutes. You'll gain a number of good, healthy contractions and maybe a little more descent. Or even rotation of the head—enough so your masterful application of the forceps will look great. When you finally arrive, you'll be even more impressive.

On entering the delivery room, the first thing to assess is the state of the obstetrician. Is his brow bathed in sweat? Is his gown spattered with gore? Do his hands betray a slight tremor? Is his smile a little forced? Next, take a look at the basin. How many pairs of discarded heavy forceps are there?

Note the general air of dishevelment of the tables and drapes, and count how many spectators are in the room . . . impending disaster always draws vultures. The OB nurse and her relief, a girl from surgery (who is trying to get a line on when you'll abandon this nonsense and go to section), two girls from the kitchen hanging around in morbid curiosity.

Next, study the anesthetist. He may have the customary look of absolute boredom, or a somewhat more anxious countenance. In either event he'll give you the benefit of his inherent doubts and hope for the best. He'd like to go home and get to bed.

Glance at the OB Supervisor, who usually has a look so dire that even you may quail, but don't ask her anything. She'll have ways of letting you know what she thinks ought to be done.

Approach the mother and talk with her. She's usually been put down twice with general anesthetic and let up, still undelivered. Inquire of her previous labors and the weights of her children. Have the drapes removed from the mother's abdomen and estimate the size of this baby. She may have already been delivered, and it helps to know this before applying the forceps. Time spent in reconnaissance was never wasted.

Only then do you approach the perineum. Glance down into the bucket to estimate the blood loss, then, at last, examine the patient. Locate an ear . . . this is usually hidden high up under the symphysis. Do not speak and spoil the impression of a master at work. Rotate the head. Apply the forceps . . . a steady pull, cut an enormous episiotomy . . . and deliver the baby, who usually has vertigo secondary to the large number of rotations. Then at once stride from the room, leaving the referring man to repair the episiotomy while the spectators rapidly fade away.

The next day you'll meet him at the daily conference where we discuss important things like how was the snow at the Mountain and did the lift break down. He'll be holding his coffee cup without a trace of last night's tremor. . . "Morning Max, how's our girl?" ■

P.O. Box 637 (99336)

From a continuing study on nasal congestion . . .

timed to work while your patient does

A study being conducted by the Department of Otolaryngology, Greater Baltimore Medical Center is stockpiling evidence that points to the fast action and prolonged relief effected by Triaminic in the treatment of nasal congestion.

Begun in March 1966, the study to date has encompassed 85 patients with common nasal disorders—and measured their response to recommended doses of Triaminic tablets.

Timed to release its oral nasal decongestant and two antihistamines within 8 hours, Triaminic was found to effect partial or complete relief in better than 82% of the subjects treated. Clearing nasal obstruction. Reducing turbinate swelling. Making breathing easier.

It's a comforting thing to know that Triaminic *really* works.

Triaminic® *timed-release tablets*

Each timed-release tablet contains:

Phenylpropanolamine hydrochloride .... 50mg. Pyrilamine maleate.......... 25mg. Pheniramine maleate ...... 25mg.

Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets.

Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

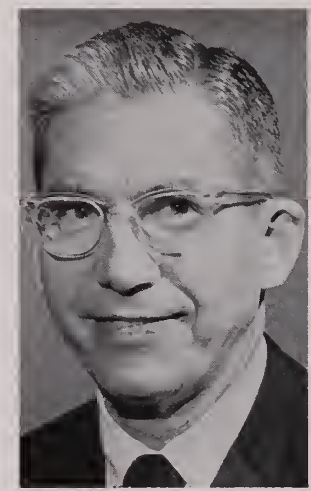
DORSEY LABORATORIES • *a division of The Wander Company* • **LINCOLN, NEBRASKA 68501**

OREGON

Oregon Medical Association —2164 S. W. PARK PLACE, Portland, Oregon 97205

PRESIDENT *Glenn M. Gordon, M.D., Eugene*
SECY.-TREAS. *Noel B. Rawls, M.D., Astoria*
EXECUTIVE SECY. *Mr. Roscoe K. Miller, Portland*
Annual Meeting, Oct. 1-4, 1968, Portland

Clarence Hagmeier, M.D. New Assistant Secretary American Society of Anesthesiologists



Clarence Hagmeier, M.D., 1968 assistant secretary, American Society of Anesthesiologists.

Clarence Hagmeier, M.D., a resident of Portland, Oregon, has been elected 1968 assistant secretary of the American Society of Anesthesiologists.

Dr. Hagmeier was elected to this office October 3 at the final session of the House of Delegates.

The Society's annual meeting was held from September 29 to October 3 in Las Vegas, Nevada.

OBITUARY

DR. GEORGE A. MAY, *Forest Grove, Oregon, died August 31 at the age of 83. He was a 1911 graduate of the University of Iowa College of Medicine, Iowa City, Lowa. Cause of death acute myocardial arrest and coronory occlusion.*

Program on Otolaryngology Scheduled December 1 and 2

A program designed for practicing physicians interested in current ear, nose and throat problems will be given December 1 and 2 at the University of Oregon Medical School.

Individual instruction, using live patient demonstrations, is available for small groups. Pre-registration is required and a tuition fee of $45 will be charged for the course.

Guest speakers are from the department of Otolaryngology, University of Oregon Medical School. They are: David D. DeWeese, Chairman, Patrick J. Doyle, and Alexander J. Schleuning II.

Registration will be held on December 1, from 8 to 9 a.m. in the School's Library Auditorium.

Nine hours of AAGP credit will be given for this course.

Program

December 1	
9:05-10:15 a.m.	*The Dizzy Patient* David D. DeWeese, M.D., Professor and Chairman, Dept. of Otolaryngology
10:30-12:00 noon	*Case discussions in small groups* Discussions will include postural vertigo, Meniere's syndrome, acoustic neuroma, post-concussion syndrome and functional dizziness
1:00-2:00 p.m.	*The diagnosis and treatment of commonly encountered hearing problems* Patrick J. Doyle, M.D., Associate Professor of Otolaryngology

PRESIDENT'S
Open Letter

Greetings to each physician in the State of Oregon from your new president. Having been in office for three weeks, as this is written, I am beginning to sense some of the pressures involved in organizational responsibility. However, with the efficient and knowledgeable help of our headquarters' staff, I shall attempt to stay on top of things through the year.

May I sincerely request that each of you communicate suggestions to me in person, by phone or by letter, as to ways the Oregon Medical Association can improve methods in accomplishing its purpose. That purpose, basically, is to improve the level of health and health care for citizens of this State, our patients. I am convinced that, if we are to achieve the highest possible level of effectiveness, it will be necessary for individual physicians, acting alone or through the Association, to cooperate with many individuals and organizations representing related fields. So I encourage each of you, at the community level, to take an active interest in health care and participate in a leadership role towards developing what is best for your area.

We physicians are a fortunate group of people. Members of the noblest profession, (there are some who might disagree), living in a time when advances and improvements are rapidly changing our practice of medicine. We face an immediate future that promises to solve many of our present problems. This is a great time to be alive!!

GLENN M. GORDON, M.D.

Again I enlist your support and concerned interest in making our working organizations, the county medical societies, and the Oregon Medical Association into the very best and highest they can become. ■

Thank you,

Glenn M. Gordon MD

2:00-3:15 p.m.	*Live case demonstrations of hearing problems* (Otologic examination will be done by course participants)
3:15-4:30 p.m.	*Case discussions in small groups* Patients with hearing problems previously examined will be discussed
4:30-5:00 p.m.	*Tour of Portland Center for Hearing and Speech*
December 2	
9:00-9:30 a.m.	*Indications for tonsillectomy, adenoidectomy and myringotomy* Alexander J. Schleuning II, M.D., Assistant Professor of Otolaryngology
9:30-10:30 a.m.	*Tonsillectomy and adenoidectomy*
10:45-12:00 a.m.	*Case discussion small groups* Problems relating to T & A's will be discussed

Dr. Cross Appointed Medical Director of RIO

Newly appointed medical director for the Rehabilitation Institute of Oregon is Leland L. Cross, M.D. Prior to his appointment with RIO, Dr. Cross was director of Physical Medicine and Rehabilitation, Los Angeles County Harbor General Hospital, and assistant professor in residence, UCLA Medical School, Department of Physical Medicine and Rehabilitation.

Leland L. Cross, M.D.

Dr. Cross has recently been appointed assistant clinical professor of neurology in rehabilitation at the University of Oregon Medical School.

Dr. Cross attended Northwestern University Medical School and spent his internship at Iowa Methodist Hospital and Raymond Blank Memorial Hospital for Children in Des Moines.

WASHINGTON

Washington State Medical Association—444 N.E. RAVENNA BLVD., Seattle, Washington 98115

PRESIDENT *Charles D. Muller, M.D., Bremerton*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual Meeting, Sept. 22-25, 1968, Seattle

Editorial Support Given WSMA Legislative Programs

From the Daily Olympian, Vancouver Columbian and Portland Oregonian, September 18, 1967

Every resident of the state owes the Washington State Medical Association a vote of thanks for its decision to support legislation making it possible to determine if drivers involved in accidents are intoxicated. The medical association took its stand at a meeting last week in Seattle.

During the last session of the Legislature, House Bill 228 passed the House after some hot debate but died in the Senate. The measure, dubbed the implied consent bill, would have required a person arrested for drunken driving to submit to a chemical test to determine the alcoholic content of his blood. If he refused, his license to drive could be revoked.

The Washington State Medical Association supported the implied consent legislation last session and feels the program is vital enough to the welfare of the state to put to a vote of the people. We agree.

The medical association's policy-making body voted to ask the Washington State Medical Association Auxiliary, the doctors' wives' organization, to set up and lead an initiative campaign to establish implied consent legislation.

The resolution approved by the medical society at its Seattle meeting also calls for a lowering of the blood alcohol level indicative of intoxication from 0.15 to 0.10. The legislation that died in the Senate also would have accomplished this.

The Washington State Medical Association takes its stand because of the many studies that show a significant number of drivers involved in accidents have been drinking. There also is medical evidence showing blood alcohol levels of more than 0.10 impair a driver's ability.

Law enforcement officers long have favored a reduction of the blood alcohol level presumed to show intoxication. Lawmen point out the 0.15 level indicates solid intoxication.

Police also emphasize the driver who is a little drunk but can drive his car fairly well is more of a menace than the driver who swerves all over and can be easily noticed, and generally avoided, by others on the highway. The driver whose judgment and skill is a little impaired causes most of the trouble.

Washington State Medical Association deserves everyone's support in its campaign to bring this important traffic safety measure to a vote.

Scientific Methods Instead of Coroners

From the Seattle Times, October 4, 1967

We note with satisfaction that renewed attention is being given the concept of abolishing the outmoded method of electing county coroners in favor of a medical-examiner system, a reform already under way in at least 32 other states.

The office of coroner is a historical remnant of an earlier era when scientific methods of investigating deaths were almost unknown.

Because elective coroners rarely are trained to utilize modern equipment and techniques now available in the field of pathology, there continue to be areas in which one really can get away with murder.

In King County and a few other places in this state, the present system has functioned reasonably well. But 22 of the state's 39 counties do not even have coroners and in 17 that do, only eight coroners are physicians.

The situation reflects the fact that most smaller counties do not have the financial resources to sup-

continued on page 1067

A Building Block approach to treating hypertension

With these three therapeutic building blocks you can create a once-a-day regimen to fit almost any degree of hypertension. See the following pages for details . . .

Consider starting your hypertensives on this basic thiazide

ABBOTT

A single daily dose of Enduron provides sodium excretion around the clock

Enduron is a true 24-hour single-dose thiazide. Its sodium excretion is not squeezed into an abrupt peak during the first several hours. It is well-sustained in a plateau-like effect—with little reduction for the first 12 hours, and decline thereafter only gradual.

Potassium loss, by contrast, is low. It reaches an early minor peak, then subsides rapidly. Moreover, since dosage is but once a day, there is but one daily peak of potassium loss. As with all thiazides, however, dietary potassium supplementation should also be considered, especially in long or intensive therapy.

Use Enduron as an ideal starting therapy in mild hypertension. Use it too, as a basic therapeutic building block with which other agents can be joined, for managing your more resistant hypertensives.

Once a day, every day

ENDURON®
METHYCLOTHIAZIDE

DAILY DOSAGE RANGE	Minimum	Usual	Intermediate	Maximum
	2.5 mg. tablet	5 mg. tablet	7.5 mg.	10 mg.

See Brief Summary on final page of advertisement.

To build added response, shift to Enduronyl

ABBOTT

The deserpidine component adds enhanced antihypertensive activity

The rauwolfia component of Enduronyl is deserpidine (Harmonyl®), a purified crystalline alkaloid supplied only by Abbott. It augments Enduron with its own antihypertensive and tranquilizing action.

Thus the combined clinical effect of these two therapeutic building blocks in Enduronyl is greater than can ordinarily be achieved with either alone.

To add flexibility, Enduronyl comes in two strengths: regular and Forte. Both provide 5 mg. of Enduron. The variation is where most helpful: in the deserpidine. The tablets are scored, and give a surprisingly wide and economical choice of once-a-day doses (see below).

Choose Enduronyl for your patients in the broad range of mild to moderate hypertension. Patient acceptance is excellent!

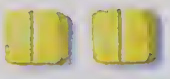
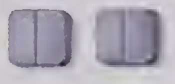
Once a day, every day

ENDURONYL®

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.25 MG.

ENDURONYL FORTE

METHYCLOTHIAZIDE 5 MG. WITH DESERPIDINE 0.5 MG.

	Minimum	Usual	Intermediate	Maximum
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.125 mg. deserpidine	 5 mg. methyclothiazide 0.25 mg. deserpidine	 7.5 mg. methyclothiazide 0.375 mg. deserpidine	 10 mg. methyclothiazide 0.5 mg. deserpidine
DAILY DOSAGE RANGE	 2.5 mg. methyclothiazide 0.25 mg. deserpidine	 5 mg. methyclothiazide 0.5 mg. deserpidine	 7.5 mg. methyclothiazide 0.75 mg. deserpidine	 10 mg. methyclothiazide 1 mg. deserpidine

See Brief Summary on final page of advertisement.

707075-R

Eutonyl affords a different kind of basic therapy for moderate to severe cases

ABBOTT

Effect tied to reduced peripheral vascular resistance; no central depressant action

Eutonyl is a unique nonhydrazine agent. It is reported to act by reducing peripheral vascular resistance.[1,2]

In clinical trials, significant reductions in mean blood pressure were seen in 84% of patients studied—all were moderate to severe cases. Eutonyl lowers diastolic in proportion to systolic, and in about half of the cases studied, reductions in the sitting and recumbent positions were nearly as great as in the standing position.

Most important: There is no central depressant action. In fact, some patients reported an *increased* sense of well being.

Here, then, is a highly effective *basic treatment* for moderate to severe cases—and one that will not hamper your patient with lethargy or drowsiness while on treatment.

Once a day, every day

EUTONYL®
PARGYLINE HYDROCHLORIDE

DAILY DOSAGE RANGE	Minimum	Usual starting	Intermediate	Maximum
	10 mg. tablet	25 mg. tablet	50 mg. tablet or as needed	200 mg.

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1. Brest, A. N., et al., Cardiac and Renal Hemodynamic Response to Pargyline, Ann. N. Y. Acad. Sci., 107-1016, 1963.
2. Winsor, T., Pargyline Hydrochloride, Hypertension, Urinary Tryptamine, and Vascular Reflexes, Geriatrics, 19:598, Aug., 1964.

See Brief Summary on final page of advertisement.

Eutron adds thiazide for enhanced therapy with milder side effects

ABBOTT

Only a 7/4 mm. span between standing and recumbent pressures in clinical trials—reduced chance of orthostatic hypotension

The combining of Eutonyl and Enduron in Eutron permits a significantly greater antihypertensive effect than with either agent used alone. This in turn may allow therapeutic success with lesser dosage—and correspondingly milder side effects.

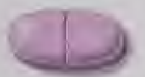
A significant finding in clinical trials was the drug's action in lowering blood pressure to *nearly equal levels in all body positions*. Total average spread between standing and recumbent readings (after treatment) was only 7/4 mm. Hg.

Thus, in your moderate to severe cases, Eutron affords a usually smooth course of therapy, often with reduced likelihood of orthostatic effects. (The usual precautions against rising suddenly, of course, will always apply.) And, because of the thiazide component, Eutron may be used in the presence of congestive heart failure.

Once a day, every day

EUTRON™

PARGYLINE HYDROCHLORIDE 25 MG.
WITH METHYCLOTHIAZIDE 5 MG.

	Minimum	Usual starting	Intermediate	Maximum
DAILY DOSAGE RANGE	 12.5 mg. pargyline hydrochloride and 2.5 mg. methyclothiazide	 25 mg. pargyline hydrochloride and 5 mg. methyclothiazide	 37.5 mg. pargyline hydrochloride and 7.5 mg. methyclothiazide	 50 mg. pargyline hydrochloride and 10 mg. methyclothiazide

See Brief Summary on final page of advertisement.

TM—Trademark

707075-R

ENDURON® | ENDURONYL®

METHYCLOTHIAZIDE

Each tablet contains
Methyclothiazide 5 mg. with
Deserpidine 0.25 mg. or 0.5 mg.

Indications: Enduron is used to control edema and mild to moderate hypertension; also used with other drugs for hypertension. Enduronyl is used in mild to moderately severe hypertension; when used with Enduronyl, more potent agents can be given at reduced dosage to minimize undesirable side effects.

Contraindications: Neither Enduron nor Enduronyl should be used in severe renal disease (except nephrosis) or shutdown; in severe hepatic disease or impending hepatic coma; in patients sensitive to thiazides. Hepatic coma has been reported as a result of hypokalemia in patients receiving thiazides.

Enduronyl is contraindicated in patients with severe mental depression and suicidal tendencies, active peptic ulcer, or ulcerative colitis.

Warnings: Consider possible sensitivity reactions in patients with a history of allergy or asthma. If added potassium intake is indicated, dietary supplementation is recommended. Enteric-coated potassium tablets should be reserved for cautious use only when adequate dietary supplementation is not practical because those tablets may induce serious or fatal small bowel lesions consisting of stenosis with or without ulceration. These small bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs.

Precautions: Use thiazides with caution in severe renal dysfunction, impaired hepatic function, or progressive liver disease. In surgical patients, thiazides may reduce the response to vasopressors and increase the response to tubocurarine. Use thiazides with caution in pregnancy (bone marrow depression, thrombocytopenia, or altered carbohydrate metabolism have been reported in certain newborn infants). Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. Antihypertensive response may be enhanced following sympathectomy.

Use Enduronyl with caution in patients with a history of peptic ulcer, as rauwolfias may increase gastric secretion. Discontinue at the first sign of mental depression. Rauwolfia alkaloids may increase hypotensive effects of surgery or anesthesia, and should be discontinued two weeks prior. They also lower the convulsive threshold and shorten seizure latency. In epilepsy, dosage adjustment of anticonvulsant medication may be necessary. Alcohol, barbiturates, or narcotics may potentiate action of deserpidine.

Adverse Reactions: During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). All patients should be observed for signs of hyponatremia ("low-salt" syndrome). Reported thiazide reactions include: anorexia, nausea, vomiting, diarrhea, headache, skin rash, dizziness, paresthesia, weakness, photosensitivity, jaundice, and pancreatitis.

Reported rauwolfia reactions include: nasal stuffiness, nausea, weight gain, diarrhea, aggravation of peptic ulcer, epistaxis, skin eruption, and reduction of libido and potency. Excessive drowsiness, fatigue, weakness, and nightmares may signal early signs of mental depression.

EUTONYL® | EUTRON™

PARGYLINE HYDROCHLORIDE

Each tablet contains
Pargyline Hydrochloride 25 mg.
with Methyclothiazide 5 mg.

Indications: For treatment of patients with moderate to severe hypertension, especially those with severe diastolic hypertension. Not recommended for patients with mild or labile hypertension amenable to therapy with sedatives and/or thiazide diuretics alone. It is desirable to establish the dosage of Eutron by administering component drugs separately.

Contraindications: Pheochromocytoma, advanced renal disease, increasing renal dysfunction, paranoid schizophrenia and hyperthyroidism. Hepatic coma has been reported as consequence of hypokalemia with thiazide therapy. Until further experience is gained not recommended for patients with malignant hypertension, children under 12, or pregnant patients.

Concomitant use of the following is contraindicated: other monoamine oxidase inhibitors; parenteral forms of reserpine or guanethidine; sympathomimetic drugs; foods high in tyramine such as cheese; imipramine and amitriptyline, or similar antidepressants; methyldopa. 2 week interval should separate therapy and use of these agents.

Methyclothiazide is contraindicated in patients with known sensitivity to thiazides.

Warnings: Pargyline hydrochloride is a monoamine oxidase inhibitor. Warn patients against eating cheese, and using alcohol, proprietary drugs or other medication without the knowledge of the physician. When indicated, alcohol, narcotics (meperidine should be avoided), antihistamines, barbiturates, chloral hydrate, and other hypnotics, sedatives, tranquilizers, or caffeine, may be used cautiously in reduced dosage. In emergency surgery ¼ to ⅕ the usual dose of narcotics, analgesics, and other premedications should be used avoiding parenteral administration where possible. Carefully adjust dose of anesthetics to response of patient. Withdraw pargyline two weeks before elective surgery.

Warn patients about the possibility of postural hypotension. Those with angina or coronary artery disease should not increase physical activity with an improvement in well being. Pargyline may lower blood sugar.

Avoid use of enteric-coated potassium tablets, as these may induce serious or fatal small-bowel lesions consisting of stenosis with or without ulceration. These small-bowel lesions have caused obstruction, hemorrhage and perforation frequently requiring surgery. Medication should be discontinued immediately if abdominal pain, distension, nausea, vomiting or GI bleeding occurs. These products contain no added potassium salts and if added potassium intake is desired, dietary supplementation is recommended. Coated potassium tablets should be reserved for cautious use when adequate dietary supplementation is impractical. In patients with a history of allergy or asthma the possibility of sensitivity reactions should be considered.

Precautions: Measure blood pressure while patient is standing to determine antihypertensive effect. Use with caution in hyperactive or hyperexcitable persons. Such persons may show increased restlessness and agitation. Withdraw drug during acute febrile illness. Watch patients with impaired renal function for increasing drug effects or elevation of BUN and other evidence of progressive renal failure; withdraw drug if such alterations persist and progress. Use with caution in patients with liver disease. As with all new drugs, complete blood counts, urinalyses, and liver function tests should be performed periodically. With prolonged therapy, examine patients for change in color perception, visual fields and fundi. Also reported have been: blood dyscrasias including thrombocytopenia with purpura, agranulocytosis and aplastic anemia; elevations of BUN, serum uric acid, or blood sugar. Symptomatic gout may be induced. In surgical patients thiazides may reduce response to vasopressors and increase response to tubocurarine.

Adverse Reactions: Pargyline may be associated with orthostatic hypotension. Mild constipation, slight edema, dry mouth, sweating, increased appetite, arthralgia, nausea and vomiting, headache, insomnia, difficulty in micturition, nightmares, impotence, delayed ejaculation, rash, and purpura have been encountered with pargyline. Hyperexcitability, increased neuromuscular activity (muscle twitching) and other extrapyramidal symptoms have been reported in a few patients with reduced cardiac reserve.

During intensive or prolonged therapy, guard against hypochloremic alkalosis and hypokalemia (especially the latter if patient is on digitalis). Observe all patients for signs of hyponatremia ("low salt" syndrome).

Reported thiazide reactions also include anorexia, nausea, vomiting, diarrhea, headache, dizziness, paresthesia, weakness, skin rash, photosensitivity, jaundice, and pancreatitis. Nocturia has been observed with the combination.

709075R

ABBOTT

TM-Trademark.

port necessary laboratory facilities. Moreover, because the office of coroner is a political function requiring participation in partisan election campaigns, it often does not attract scientifically trained individuals bent on professional careers.

A plan to establish a state-wide medical examiner's office which would administer a centralized laboratory and supervise regional medical investigators in all 39 counties, has been submitted to the Legislative Council by the Washington State Medical Association.

While certain technical details remain to be ironed out—particularly those relating to financing and jurisdiction—The Times endorses the general principal of the plan in the belief that it would provide for more adequate professional investigations.

Not only would it give law-enforcement agencies a valuable assist in solving crimes, but the medical-examiner system also would provide a more effective means of detecting industrial hazards and identifying disease-control problems representing a potential menace to public health.

Medical Examiner Need Discussed

Prior to the Legislative Council Subcommittee on Local Government hearing September 30, Seattle, physicans met and reviewed the course of action to be taken by the WSMA in securing passage for a Medical Examiner System. Seated L-R starting at top center are: Gordon D. LaZerte, Seattle, Chairman, WSMA Committee on the Medical Examiner System; J. Bruce Beckwith, Seattle, Assistant Professor of Pathology, University of Washington School of Medicine; N. Karle Mottet, Seattle, Professor of pathology, University of Washington School of Medicine; Robert P. Gibb, Bellingham, pathologist; Robert L. Rood, Bellingham, Whatcom County Coroner; Charles P. Larson, Tacoma, pathologist and WSMA Vice President; Alex A. Ritzen, Seattle, pathologist; R. C. Henry, Portland, chief Medical Examiner for State of Oregon; Richard T. Vimont, Tacoma, pathologist; Hector Aldape, Seattle, pathologist; and Mr. Harlan Knudson, WSMA staff. Joining Dr. Henry as an expert witness was Theodore J. Curphey, Chief Medical Examiner (Coroner) for Los Angeles County in California.

The Committee on Local Government is expected to hold further hearings on revised drafts of HB 460, the Medical Examiner Act introduced during the 1967 State Legislative Session.

OBITUARIES

DR. SAUL RUBIN, *Seattle, died August 4 at the age of 68. He was a 1925 graduate of McGill University Faculty of Medicine, Montreal, Canada, and was licensed to practice medicine in 1926. Cause of death cardiac arrest due to acute myocardial infarction.*

DR. HENRY REESE, *Lynnwood, died August 1, at the age of 94. He was a 1904 graduate of Northwestern University Medical School, Chicago, Illinois, and was licensed to practice medicine in 1904. Cause of death was broncho-pneumonia.*

DR. LAURELL LUGAR, *Yakima, died August 9 at the age of 77. He was a 1912 graduate of the University of Iowa College of Medicine, Iowa City, Iowa, and was licensed to practice medicine in 1919. Cause of death myocardial infarction due to arteriosclerotic heart disease.*

DR. HARRY H. ROBINSON, *Spokane, died August 11 at the age of 84. He was a 1910 graduate of Johns Hopkins University School of Medicine, Baltimore, Maryland, and was licensed a general practitioner in 1911. Cause of death was coronary thrombosis.*

DR. ROBERT L. CUSHING, *Spokane, died August 30 at the age of 54. He was a 1939 graduate of Creighton University School of Medicine, Omaha, Nebraska. Cause of death was fatty metamorphosis of liver.*

DR. ROY R. KERKOW, *Wenatchee, Washington, died August 30 at the age of 78. He was a 1915 graduate of the University of Maryland School of Medicine, Baltimore, Maryland, and was licensed to practice medicine in 1916. Dr. Kerkow was a fifty year member of the Washington Medical Association. Cause of death was carcinoma of lung with pleural effusion.*

Low Gross winner, Horace A. Anderson, Tacoma, with trophy and gift.

Accepting the tournament cup for low net honors is Donald T. McLaughlin, Seattle. Looking on are Donald E. Brown, Lynnwood, (center), and Horace A. Anderson, Tacoma, low gross champ.

Winning members of the King County team are (L-R) Dean C. Sloan, Ole J. Jensen, Jr., L. Stanton Stavney, and Robert J. Evoy, all of Seattle.

Record Turnout at 1967 Annual Golf Tourney

A record number of physicians turned out for the annual meeting of Washington State Medical Golf Association September 11 at the Everett Golf Club. One hundred sixty-two golfers participated in the tourney held each year in conjunction with the annual convention of the WSMA.

Horace A. Anderson, Tacoma, won the low gross championship from Ole J. Jensen, Jr., Seattle, in a sudden death playoff after tieing with eighteen hole scores of 76. Dr. Anderson won on the first hole of the playoff. Low net honors went to Donald T. McLaughlin, Seattle, when he combined a gross score of 83 with a 16 handicap for a low net total of 67. First Division low net honors went to Dean A. Sloan, Seattle, with a 68. Second Division to James J. Ahern, Seattle, 69. Third Division to Robert F. Hagen, Everett, 68. Winner under the Calloway handicap system was Walter F. Krengel, Seattle, with a low net 72.

The County Medical Society Team Championship went to King County. Members of the winning team were Dean C. Sloan, Ole J. Jensen, Jr., Robert J. Evoy, and L. Stanton Stavney, all of Seattle. Any physician entering the tourney is eligible to represent his County Society with the physicians having the four low gross scores making up the team.

Ralph H. Loe, Seattle, was named Tourney Chairman for 1968. The tourney will be played Monday, September 23, during the Annual WSMA Convention, September 22 thru 25 in Seattle.

Ralph H. Loe, chairman of 1968 WSMA annual golf tournament with the Dan Houston Memorial Trophy.

Physician Payment—Blue Cross

A procedural change in effect since July 12 of this year concerns the method currently employed by Blue Cross to pay hospital professional fees. In the past, Blue Cross paid these fees to its members directly from a hospital billing. But our rapid growth and changes in hospital medical practices, whereby the patient is seldom seen by only one or two physicians, has made it increasingly difficult to accurately determine the correct physician to pay and the correct amount to pay, etc.

Blue Cross is requesting that all professional billing covering services provided members in hospitals, be submitted on a Blue Cross Physicians Service Report (Form 9). In most cases, Blue Cross will then issue a co-payee benefit check. Use of these forms will assure more effective handling of these bills. If these forms are not available, inform Blue Cross, and you will receive a supply promptly.

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Each tablet contains:

Potassium Iodide .... 195 mg.
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Phenobarbital, Caution: May be habit forming ... 21 mg.
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Precautions: Usual for aminophylline-ephedrine-phenobarbital. Iodides may cause nausea, long use may cause goiter. Discontinue if symptoms of iodism develop.

Iodide contraindications: tuberculosis, pregnancy.

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MUDRANE GG ELIXIR—Four 5 cc teaspoonfuls is equivalent to one Mudrane GG tablet. Dosage adjusted to age and weight of child. Mudrane GG Elixir is for pediatric patients and those who think they cannot swallow tablets. Dispensed in pint and half gallon bottles.

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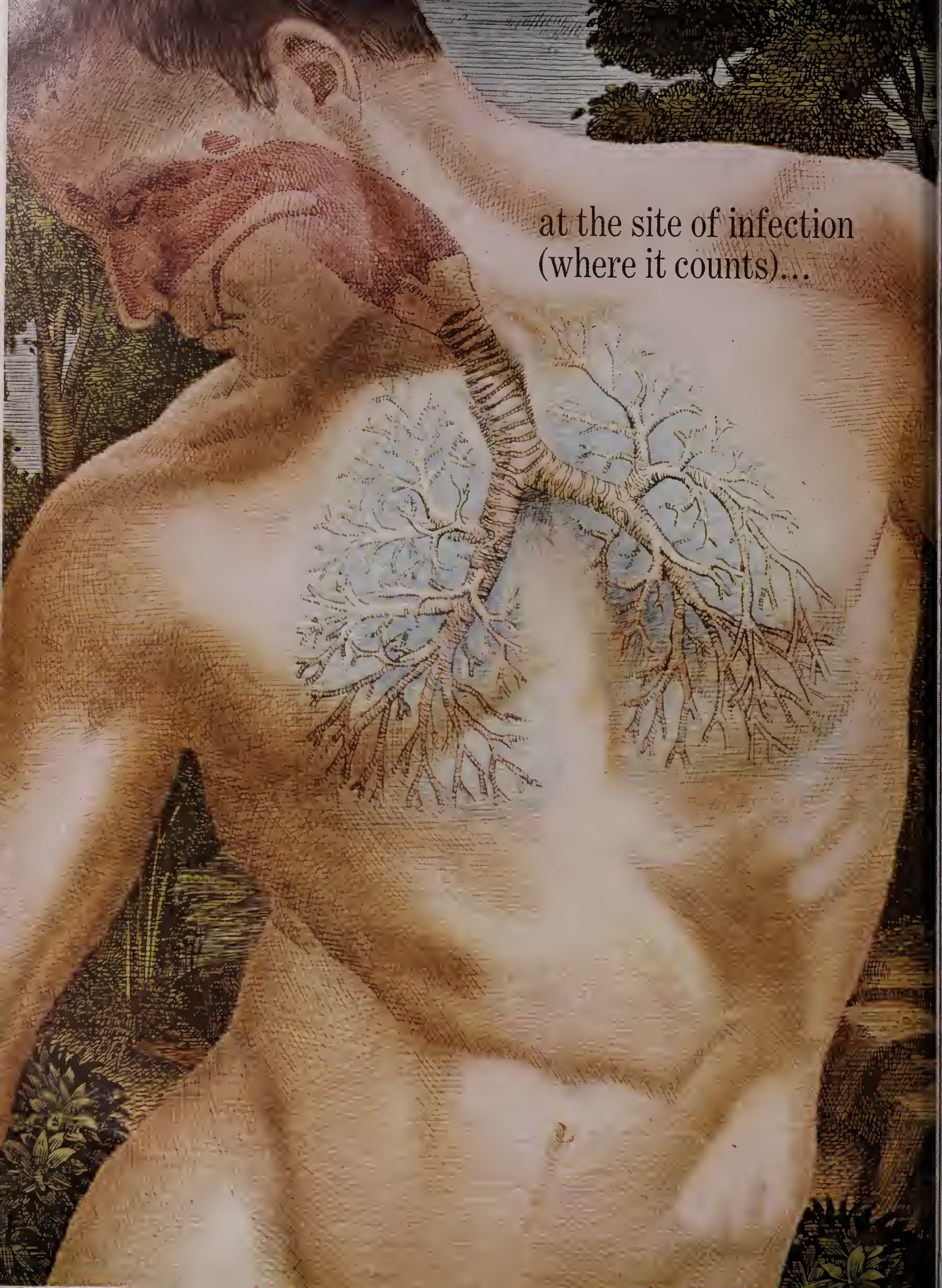
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(where it counts)...

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Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

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New! Ready-mixed Ilosone Liquid 125! (Contains erythromycin estolate equivalent to 125 mg. erythromycin base per 5-cc. teaspoonful.)

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Erythromycin Estolate

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(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by micro-organisms sensitive to its action—especially staphylococci, hemolytic streptococci, and pneumococci.

It has been effective in streptococcus infections, particularly acute bacterial pharyngitis and tonsillitis; staphylococcus disease, including soft-tissue infections, furunculosis, abscesses, cellulitis, carbuncles, and wound infections; pneumococcus pneumonia and acute bronchitis with pneumococci on culture, bronchopneumonia, and otitis media.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents; surgical procedures should be performed when indicated, and large doses of the antimicrobial agents should be employed.

Penicillin is the drug of choice for syphilis and gonorrhea, but Ilosone in multiple 500-mg. doses has been useful in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Known history of sensitivity to this drug; preexisting liver disease or dysfunction.

Adverse Reactions: Hepatic dysfunction with or without clinical jaundice has been reported infrequently. Changes in liver function tests indicative of intrahepatic cholestasis appear to be the result of individual idiosyncrasy. Findings subsided when treatment was discontinued. Occasionally, symptoms simulated extrahepatic obstructive jaundice or the colic of biliary tract disease.

When jaundice appeared to be related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Gastro-intestinal disturbances not associated with hepatic effects and occasional allergic manifestations (urticaria, skin eruptions, and, rarely, anaphylaxis) have been reported. The normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Administration and Dosage: Ilosone is administered orally.

Infants and children under twenty-five pounds, 5 mg. per pound every six hours; twenty-five to fifty pounds, 125 mg. every six hours. Adults and children over fifty pounds, 250 mg. every six hours.

For severe infections, double the dosage. When larger doses are indicated, consider parenteral erythromycin therapy. In beta-hemolytic streptococcus infections, maintain treatment for ten days to prevent rheumatic fever or glomerulonephritis.

In syphilis, a total of 20 to 30 Gm. is administered in divided doses for ten to fifteen days. Close follow-up is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examination of spinal fluid is recommended during follow-up.

In gonorrhea, the dosage is 500 mg. four times a day for four days. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics and monthly serologic tests for three months. For detailed information, consult the package literature.

How Supplied: Pulvules® Ilosone, Capsules, N.F., 125 mg.* and 250 mg.*

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Ilosone Drops, 5 mg.* per drop.

Tablets Ilosone Chewable, N.F., 125 mg.*

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*Base equivalent. [080967]

References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., 247:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., 12:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., 239:198, 1960.

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

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Overweight problem?

Pat, this was taken Aug 1962

This is your mother,
Picture taken May 26, 1963
Love Mom

These are photographs borrowed from the files of a Missouri physician. The grossly overweight patient pictured in August 1962 succeeded in shedding 110 pounds in the following ten months by adhering to a diet program under the supervision and encouragement of her physician. To help control her desire for food and also "burn off" additional calories, the physician recommended Obestat, one tablet a day. Doctor and patient admit that Obestat fortified her determination to stick to the diet during the difficult weeks of adjustment.

Obestat can help your overweight patient break the eating habits that cause obesity.

Obestat suppresses appetite.

Obestat boosts metabolism.

Obestat offsets emotional symptoms.

Each OBESTAT TY-MED* tablet or capsule contains: Methamphetamine hydrochloride 10 mg./Amobarbital (Warning, may be habit forming) 60 mg./Thyroid 150 mg.

*Lemmon brand of timed-release medication.

Dosage: One Obestat Ty-Med tablet or capsule daily, taken before breakfast, is satisfactory for most patients. Occasionally, 2 tablets or capsules may be required.

Side Effects: Side effects such as headache, dizziness, nervousness, excitability, insomnia, dyspnea, palpitation or gastrointestinal distress are infrequent and usually mild.

Precautions: An increase in blood pressure or basal metabolic rate should be observed carefully.

Contraindications: Myocardial or coronary disease, diabetes, marked hypertension, hyperthyroidism or idiosyncrasy to the ingredients.

Supplied: Bottles of 30, 100 and 1000 tablets or capsules.

Caution: Federal law prohibits dispensing without prescription.

References: Ort, F.: Adjuvant treatment of obesity with an anorectic-calorigenic agent, Clin Med 70:1999 (Nov) 1963. Isenberg, C. L.: Treatment of the overweight patient in general practice, Clin Med 72:663 (Apr) 1965. ©1966 HAACK 1-66 MADE IN U.S.A.

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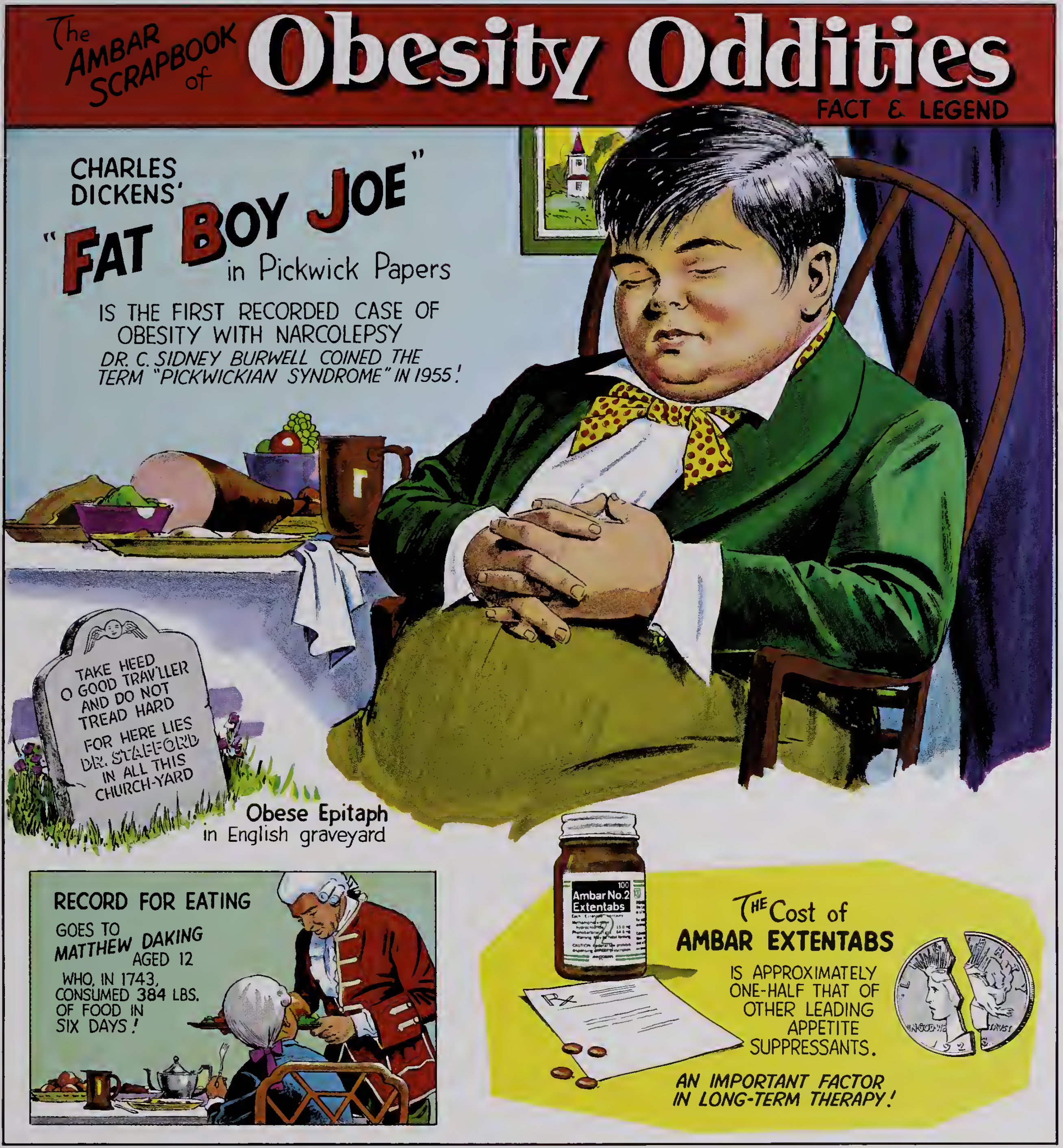
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CONTROL FOOD AND MOOD ALL DAY LONG WITH A SINGLE MORNING DOSE

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methamphetamine HCl 15 mg.,
phenobarbital 64.8 mg. (1 gr.)
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One Ambar Extentab before breakfast can help control most patients' appetite for up to 12 hours. Methamphetamine, the appetite suppressant, gently elevates mood and helps overcome dieting frustrations. Phenobarbital, the sedative in Ambar, controls irritability and anxiety...helps maintain a state of mental calm and equanimity. Both work together to ease the tensions that erode the willpower during periods of dieting.

Also available: Ambar #1 Extentabs®—methamphetamine hydrochloride 10 mg., phenobarbital 64.8 mg. (1 gr.) (Warning: may be habit forming).

BRIEF SUMMARY/**Indications:** Ambar suppresses appetite and helps offset emotional reactions to dieting. **Contraindications:** Hypersensitivity to barbiturates or sympathomimetics; patients with advanced renal or hepatic disease. **Precautions:** Administer with caution in the presence of cardiovascular disease or hypertension. **Side Effects:** Nervousness or excitement occasionally noted, but usually infrequent at recommended dosages. Slight drowsiness has been reported rarely. See package insert for further details.

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Contraindications: Hypersensitivity to antihistamines. Not recommended for use during pregnancy.
Precautions: Until patient's response has been determined. he should be cautioned against engaging in operations requiring alertness. Administer with care to patients with cardiac or peripheral vascular diseases or hypertension.
Side Effects: Hypersensitivity reactions including skin rashes, urticaria, hypotension and thrombocytopenia, have been reported on rare occasions. Drowsiness, lassitude, nausea, giddiness, dryness of the mouth, mydriasis, increased irritability or excitement may be encountered.
Dosage: 1 Extentab morning and evening.
Supplied: Bottles of 100 and 500.

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in sinusitis, colds, U.R.I.

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Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

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PRESIDENT'S page

Local Awareness, Activity, Organization and Decision

The leadership of organized medicine, according to some authorities, has been discredited both in and out of the profession. Also, according to some, it is now at a disadvantage to bring about any kind of a working reconciliation so that government participation in the health care system does not become a matter of the control of practice. According to these same individuals, discredited or not, no other organization can accomplish such a reconciliation as well as organized medicine. It is conceivable that organized medicine cannot long remain an onlooker or be regularly bypassed in health care planning. Similarly, according to some authorities, our spokesmen will need to recast their goals and the member physicians will need an opportunity for frank debate and a shift of views.

The response to this occurred at the annual meeting of the Washington State Medical Association in September, 1967. The House of Delegates came to grips with these suppositions and asked some very searching questions about the complex changes in medicine. In asking these questions, thoughts were clarified regarding some of the prevailing misconceptions about medical care. The Executive Committee and Board of Trustees have exhibited considerable enthusiasm for the very timely and "forward looking" actions taken by the House of Delegates. At the October 8 meeting on the Board of Trustees, the implementation of the policy decisions of the House of Delegates was provided for in many ways.

William E. Watts, President-Elect, is to serve as chairman of the WSMA Committee on Revision of Constitution and Bylaws. This committee will implement the directive of the House of Delegates that the "Committee on Revision of Constitution and Bylaws study the Constitution and Bylaws and WSMA committee structure and make recommendations to the House of Delegates in September 1968, in respect to adapting this structure to the responsibilities of medicine in the current environment, the consolidation of overlapping committee jurisdiction; the improvement of communication; and the improvement of the decision making processes of the House of Delegate, the Board of Trustees, and the County Medical Societies." The Committee's first meeting is scheduled for March, and the Committee will be provided with a first working draft of a revised Constitution and Bylaws by that time. All recommendations made by the House of Delegates will be taken into consideration in the draft of revisions. Likewise, the membership is herewith solicited to submit further recommendations to this Committee.

To satisfy the need to keep the Board of Trustees members and the WSMA membership currently informed, the Executive Committee recommended that a special Board of Trustees meeting be held on Sunday, December 10, with the discussant to be Waldo O. Mills, Chairman of the WSMA State Department of Public Assistance (Advisory) Committee. Dr. Mills' committee currently is discussing problems relative to Title XIX with the Department of Public Assistance. Invitations to the special Board meeting will be extended to the chairmen, or a selected representative, of each WSMA Technical Advisory Committee. Along similar lines, a special Board of Trustees meeting has been set for February 18, 1968.

At this time, current Association business will be discussed in addition to a special briefing session, to which representatives of County Medical Societies and County Medical Service Bureaus will be invited.

The Board of Trustees also took the following actions relative to developing close liaison between WSMA and SAMA (Student American Medical Association); 1. Commended SAMA officers for their interest; 2. Agreed to assist in developing closer relations; 3. Approved the appointment, by Dr. Watts of a committee of three physicians to work with SAMA; and 4. Agreed to continue to publish SAMA Newsletters and to provide additional information relative to WSMA activities.

The continuation of previous programs and the initiation of new activities authorized by the House of Delegates will provide the Association's Executive Committee, Board of Trustees, some forty committees, twenty-six county medical societies, other medical organizations, essential office staff, and the Foundation with abundant work during the twelve months ahead.

On January 6 and 7, the Washington State Medical Education and Research Foundation will sponsor an introductory course in "Planning Processes and Comprehensive Health Planning" for 200 physicians at the Hyatt House at the Seattle-Tacoma International Airport under a U.S. Public Health Service Grant. The objective of this exposure is to provide physicians with orientation in the health planning process. If this information is first provided to physicians, representatives of voluntary health agencies, private practice, public health practice, and other organized service programs, then the establishment of a continuing state program of training, studies, and demonstration in comprehensive health planning will be made more effective. That planning will be done seems a certainty. The medical profession will be well represented on the State Health Planning Council to be appointed soon by the Governor under Public Law 89-749. Therefore, it seems appropriate and essential that we prepare ourselves by learning to plan, and that once the planning process has begun, we introduce medical inputs into the planning process. This, hopefully, will result in a state health plan which seeks to maintain and improve the position of individual physicians, physicians as a group, and society, in a status favorable to the maintenance of high quality health care standards; in the interest of patients and potential patients; and to provide the maximum quality of such care to patients and potential patients.

Constant work on medical criteria and fees throughout the year by the Industrial Insurance Committee and its subcommittees, will continue along the lines set forth in the Committee's Annual Report. However, WSMA study of cost factors will also be required in respect to Title XIX and other programs. There will be an increasing need for the professions presenting data on physicians costs in providing these services.

As time goes on it is becoming increasingly clear that the complex relationships involved in experimental projects in the delivery of health services under new patterns and arrangements, must be a primary concern of each county medical society and its membership. Should county medical societies ask for help, the WSMA Executive Committee will request the Foundation to become the information, and if requested, the organizing, entity for such projects. The Executive Committee will then make every effort to investigate. If the request is in line with WSMA policy, it will be forwarded to the Foundation for a feasibility report to form the basis for further discussion with the County Medical Society concerned.

In reviewing what has been written above, it is clear that some activities can be handled in large part at the state level. Others depend on strong parallel committee action in the 26 County Medical Societies, in the general practice and medical specialty groups. Many of the issues involved call for county medical society and membership awareness and decision. This we feel is essential—namely local awareness, activity, organization and decision. ■

Charles D. Muller MD.

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Offers prompt pain relief

Relief of neuritic pain from *herpes zoster* (shingles) is prompt[1-3]—usually after the first few intramuscular[2] injections—particularly when therapy is administered early.[3,4] The duration of disability in many patients is often significantly shortened.[2] Postherpetic neuralgias—even in the elderly—rarely develop.[1,4] Complete pain relief is observed in most patients within 5 days.[2]

Administration in *herpes zoster:* one ampul (1.3 cc.) I.M. daily for 2 to 5 days. Caution: For intramuscular use only. Inadvertent I.V. administration may cause anaphylactoid reaction. Supplied: Boxes of 10 ampuls, 1.3 cc. each.

References:
1. Combes, F. C. and Canizares, O.: *New York State J. Med.* 52:706-708 (Mar. 15) 1952.
2. Xander, G. W.: *Western Med.* 1:14 (Sept.) 1960.
3. Baker, A. G.: *Penna. Med. J.* 63:697-698 (May) 1960.
4. Lehrer, H. W., Lehrer, H. G., and Lehrer, D. R.: *Northwest Med.* 75:1249-1252 (Nov.) 1955.

Sherman Laboratories
Detroit, Michigan 48211

(Continued from page 1049)

AAP Announces Head Start Medical Consultation Program

A new partnership between Project Head Start and the pediatricians of America was announced today by the Office of Economic Opportunity and the American Academy of Pediatrics.

Sargent Shriver, director of OEO, and William S. Anderson, M.D., F.A.A.P., president of the AAP, in a joint statement, said that the Academy will organize and direct the Medical Consultation Program of Head Start child development programs in nearly 2,000 communities throughout the United States.

The Academy has chosen Robert S. Mendelsohn, M.D., F.A.A.P., a pediatrician from Chicago, and formerly medical director, Project Head Start, Cook County Office of Economic Opportunity, to direct the program.

Mr. Shriver stressed that this contract represents a new type of relationship between an agency of the Federal Government and a voluntary professional organization. The American Academy of Pediatrics has accepted a major responsibility for ensuring that the health services provided to Head Start children adequately meet the health needs of these children their families, and the community in which they live.

Dr. Anderson explained that the AAP will select about 300 physician consultants from its membership and from other leaders in the field of child health, to evaluate the medical aspects of the Head Start program at the state and local level. He emphasized that as more physicians gain experience in working in community health programs, their increased skills and knowledge will make their advice more valuable in planning and carrying out those programs which require partnership between physicians and government.

Each medical consultant will work with the medical director and other health professionals in Head Start projects.

He will review medical aspects of Head Start applications submitted by a community; meet with local planning committees to map out Head Start medical programs; maintain contact with program medical directors; follow up and evaluate programs, and maintain liaison with OEO regional and national offices.

Consultants will work funding and evaluating Head Start health programs, helping them interpret the needs of the children, the resources of the community, and the success of the Head Start programs. The consultant will supplement, rather than replace, the medical and administrative skills available in each community.

"I believe this is an activity which will most certainly expand," Dr. Anderson emphasized, "and could set an important trend in the programs of medical organizations."

CLASSIFIED ADVERTISEMENTS

All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than the 15th of the month preceding date of issue. Proof is not shown. Copy of ad as it appeared in the journal accompanies billing.

PRACTICE OPPORTUNITIES

OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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SEMI-RETIRED GP WANTS ASSOCIATE—Younger man to whom he can gradually turn over his practice. Suburban area of Tacoma, 1 block from hospital. Low overhead, good location in fine residential area. Phone collect or write L. E. Skinner, M.D., 5920 - 100th St., S.W., Tacoma, WA. 98499. JU 4-3338.

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LOCUM TENENS—Experienced and general surgeon available for 2 weeks November or December. Washington, Oregon or Idaho. Write Box 7-A, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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Meetings OF MEDICAL SOCIETIES

AMA Annual—San Francisco, June 16-20, 1968.

AMA Clinical—Houston, November 26-29, 1967; Miami Beach, 1968.

AMA Rural Health Conference, March 29-30, 1968, Seattle.

Oregon Medical Association—Oct. 1-4, 1968, Portland.

American Physicians, Society for Physiologic Tenson Control—Vancouver, B.C., May 16-19, 1968.
Pres. Herman A. Dickel, Portland
Sec., Robert Rinehart

Washington State Medical Association—Sept. 22-25, 1968, Sept. 14-17, 1969, Seattle; Sept. 13-16, 1970, Spokane; Sept. 19-22, 1971, Seattle.

Idaho Medical Association—June 26-29, 1968, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society
Pres., John W. Whitelaw, Vancouver, B.C.
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy.—April 4-6, 1968, Hilton Hotel, Portland, Oregon.
Pres., Henry Zeldewitz, Vancouver, B.C.
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association
Pres., Serge Bryner, Palo Alto, Calif.

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

West Coast Allergy Society—Nov. 30-Dec. 2, 1967, Phoenix, Arizona
Pres., John S. O'Toole, Riverside, Calif.
Sec., Roy R. Matteri, Portland

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.)
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
Sec., E. W. Landreth, Portland

Oregon Radiological Society — University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Frederick R. Asbury, Corvallis
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society — Quarterly Meetings, Congress Hotel, Portland
Pres., Donald Beardsley, Portland
Sec., C. A. Macfarlane, Portland

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland
Sec., David Sellers, Portland

Portland Academy of Pediatrics — 1st Monday
Pres., C. W. Van Rooy, Portland
Sec., Glenn Lembert, Portland

Portland Academy of Psychiatry — Fourth Tuesday except Dec., June, July, Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May)
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland

UOMS Alumni Association — Annual Meeting, April 24-26, 1968, Portland
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract. — 4th Mon., exc. June, July, Aug., Dec.
Pres., Donald McLaughlin, Seattle
Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto. — 3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Robert Laughlin, Seattle
Sec., D. F. Milam, Jr., Bellevue

Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Bernard Gomberg, Seattle
Sec., Joe J. Griffin, Lynnwood

Seattle Pediatric Society — 3rd Friday (Sept.-May), Arctic Club
Pres., James Tucker, Seattle
Sec., Janice Keller, Seattle

Seattle Surg. Soc. — 4th Mon. (Sept.-June)
Pres., Carl Hutchinson, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society—Quarterly
Pres., Otto J. Penna., Spokane
Sec., Robert E. Jensen, Spokane

Tacoma Academy of Internal Medicine —4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle
Sec., John E. Nelson, Seattle

Washington Academy of General Practice—Meeting, May 2-3, 1968, Tyee Motor Inn, Olympia
Pres., William Mead, Seattle

Washington State Radiological Society —Quarterly, Seattle
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists Quarterly Seattle Annual Meeting
Pres., Richard J. Ward, Seattle
Sec., Philip Bridenbaugh, Seattle

Wash. St. Soc. of Allergy
Pres., Paul Van Arsdel, Jr., Seattle
Sec., S. H. Tarica, Seattle

Yakima Surgical Society—Last Thursday (Sept.-May)
Pres., Frank LeCocq, Yakima
Sec., John Harrington, Yakima

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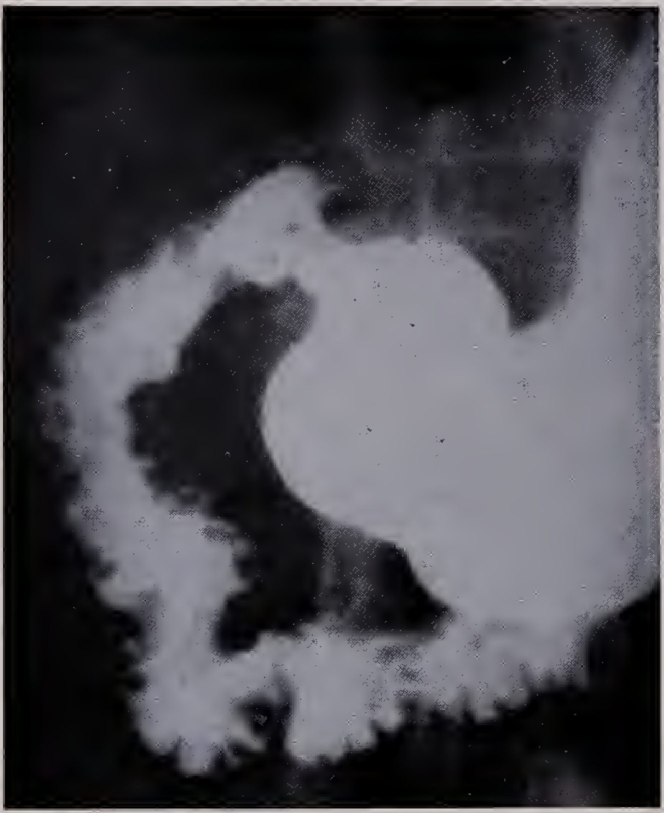

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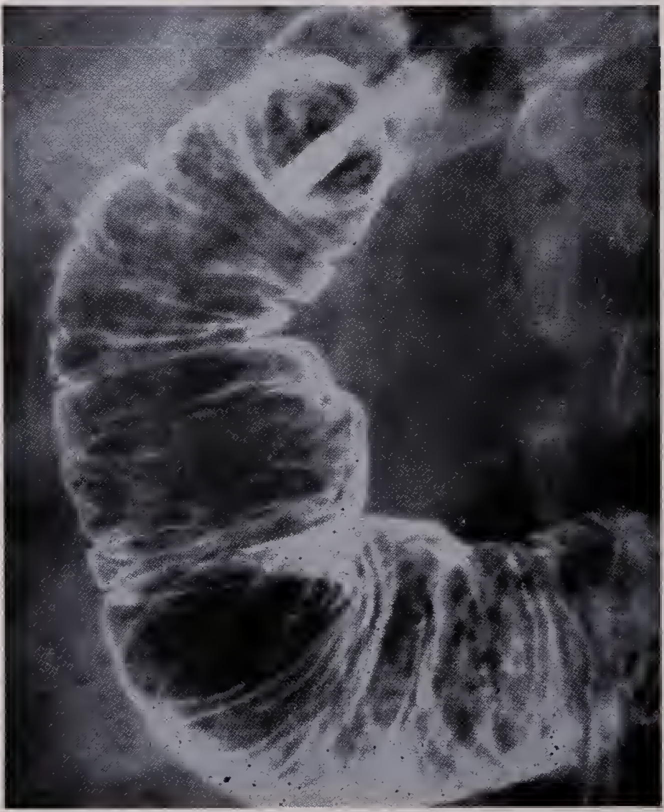

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(1) Bilbao, M. K.; Frische, L. H.; Rösch, J., and Dotter, C. T.: Hypotonic Duodenography, Scientific Exhibit, Radiological Society of North America, Chicago, Nov. 27–Dec. 2, 1966.

(2) Bilbao, M. K.; Frische, L. H.; Dotter, C. T., and Rösch, J.: Hypotonic Duodenography, Radiology, in press.

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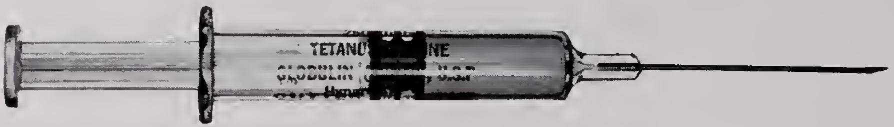

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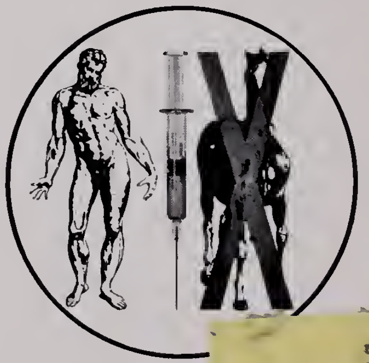

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NEWS Deadline for news copy is the 10th of the month preceding date of issue.

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Before prescribing, see complete prescribing information in SK&F literature or *PDR*. A brief precautionary statement follows.
Contraindications: Glaucoma, prostatic hypertrophy, stenosing peptic ulcer, pyloroduodenal obstruction, or bladder neck obstruction.
Precautions: Use cautiously in the presence of hypertension, hyperthyroidism, coronary artery disease; warn vehicle or machine operators of possible drowsiness.
Usage in Pregnancy: Use cautiously, especially in the first trimester. *Note:* The iodine in isopropamide iodide may alter PBI test results and will suppress I^{131} uptake; discontinue 'Ornade' one week before these tests.
Adverse Reactions: Drowsiness; excessive dryness of nose, throat or mouth; nervousness; insomnia. Other known possible side effects of the individual ingredients: nausea, vomiting, diarrhea, rash, dizziness, fatigue, tightness of chest, abdominal pain, irritability, tachycardia, headache, difficulty in urination. Thrombocytopenia, leukopenia and convulsions have been reported but no causal relationship has been established.

a stuffy nose
is no
laughing matter

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Each capsule contains 8 mg. of Teldrin® (brand of chlorpheniramine maleate), 50 mg. of phenylpropanolamine hydrochloride, and 2.5 mg. of isopropamide, as the iodide.

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give him all-day
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Book Reviews

The following letter was written in response to a routine request for information about publication of book reviews:

Miss Nancy Highkin
Book Review Department
The Williams & Wilkins Co.
428 East Preston Street
Baltimore, Maryland 21202

Dear Miss Highkin:

Repeatedly, our surveys have indicated less interest in book reviews than in any other feature of our journal. Consequently, we have all but eliminated them. Gladly, however, we publish notice of books received. This is probably the best advertisement the publisher can obtain and may well be worth the cost of the review copy sent.

We are disturbed by lack of interest in book reviews. For many years they were a highly regarded feature of this journal. We have not made any studies of the reasons for this apparent lethargy. Have you? Do we need a new way of writing them? Of presenting them? Of cooperating with publishers? Do physicians buy as many books as they should? If they do, how do they select them. What information do they want before they buy?

We shall be happy to have suggestions.

Editor, Northwest Medicine

We agree with the thoughts expressed in this reply:
Editor, NORTHWEST MEDICINE

Miss Highkin has forwarded your letter to me. In it you were concerned about readers' lack of interest in book reviews, and wondered whether we have made any studies in this area.

No, we haven't, but I can offer my thoughts on the subject. There are at least two ways of thinking about a book review section in a journal. One is that it is a service, a sort of survey with praise or blame, covering the literature for the reader. In this way reviews can have a kind of automatic character, like, say, a bibliography. Valuable, perhaps, but not very absorbing reading.

The other is that reviews are like articles, and should have some perspective, literary merit, and even should editorialize. It is worth noting that Medical Opinion and Review approaches book reviews with this attitude. I enclose, for comparative purposes, two reviews of the same book that exemplify what I am saying.

The other questions you ask are near and dear to a publisher's heart (among other places). Do physicians buy as many books as they should? I suspect not, for several reasons: things are changing so fast that confidence in the recency of the material covered is suspect; a busy practice interrupted by detail men, direct mail advertisements, plus the many free circulation journals, may produce a certain fatigue; keeping up with just one narrowly confined field may seem too time-consuming.

What information do doctors want before they buy? I wish I knew! Of course an itemizing of the chapters; the author's qualifications; a general description of the author's approach to the subject, perhaps; indication of illustrations, where appropriate; all of these we include in our advertising when space and economy allows. Reviews we regard highly, partly to help us understand the merits of the book, and partly for their quotability in advertising. But each book is a new, and unproved entity, and we have to think through to find the right weighing of all these elements. Sometimes we never make it, and other times we do (and on top of all this it is clear that many books sell themselves, so to speak).

How do physicians select the books they buy? In the larger teaching centers, local bookstores do rather well, and there is a wider spread of kinds of books sold. Clinical research books and symposia have a large market here. Direct mail, journal advertisements and book reviews help. In areas outside of medical centers, away from bookstores—direct mail, journal ads, and reviews are perhaps the only stimullants (to buy books).

I hope these somewhat unorganized comments will help you out. I'm afraid that I may simply have told you what you already know, though.

Sincerely,
PAUL A. LOWDENSLAGER
Head of Direct Sales
The Williams and Wilkins Company
Baltimore, Maryland

What information about books do you want? Ed

Meeting an Urgent Need

Editor, NORTHWEST MEDICINE:

The Open Door Clinic is a new health service center in the University District in Seattle, that your readers might be interested in. The group was formed in response to an unmet community need concerning drugs, their use and abuse, problems of drug users, and lack of accurate information concerning drugs. With use apparently on the rise, psychological confusion in many young people, lack of intergenerational communication, and gross distortion and sensationalism of facts in the mass media, the need for such an organization as the Open Door seemed obvious. To provide health and counseling services to those people disenchanted with establishment or conventional resources and provide information concerning drugs, their use and abuse, and the "hippie" phenomena, are the aims of the clinic.

The organization offers a multidiscipline, multiservice approach to the drug problem in particular, and/or alienated youth in general. This effort is totally volunteer, composed of doctors, nurses, house staff, social workers, lawyers, hippies, anthropologists, college students, housewives, and just plain interested people. Services offered include: a weekly health clinic, for dispensary type medical problems; weekly Planned Parenthood clinic; a venereal disease detection center; 24 hour telephone to handle crisis situations; counseling service, both acute and long term; group therapy sessions; seminars on drugs; and a speakers bureau.

Because of our wide diversity of backgrounds we feel that we can bring a unique approach to the problem of alienated and searching youth. As a nonestablishment agency we are often able to establish rapport quickly and get to the heart of the individual's particular problem. Since some of the staff have recently grappled with the same problems, a great deal of empathy is generated which paves the way for meaningful communication. Through understanding we can often convince the client to utilize conventional sources or to attempt closer communication with parents, or to return to the Clinic for further assistance.

Thus far, the response has been gratifying. Many organizations and individuals in the community, having recognized the same need as we, have come to our aid. A partial list includes: The American Friends, University of Washington, Planned Parenthood, King County Medical Association, School of Social Work at the University of Washington, Crisis Clinic, Juvenile Court, and Washington Public Assistance. Of course, "the proof is in the pudding"; each day we have had more and more use of the services offered. Frequently, all three of our telephone lines are tied up, and the word of our existence is beginning to be widely known. With continued support we hope to be able to meet some of the needs in this area.

We are hopeful that with our wide range of information from medical to philosophical and from actual use to scientific understanding of drug physiology and pharmacology and with a fine research opportunity that we can make a significant contribution to education, in addition to our more immediate services.

It is our feeling that in these changing times it is imperative to maximize clear and accurate communications; so that this might facilitate intelligent inquiry, thought, and discussion to fully utilize our historical intellectual thought processes for problem solving.

DAVID BEARMAN, M.D.

Rights of the Individual and Duties of Legislators

The survival of democracy depends, first and foremost, upon preserving the rights of individuals. Each and every one of us has a personal responsibility for making sure that this is done, and we can enjoy the benefits of democracy to the full only if we play our individual parts in protecting those rights, both for ourselves and for each other.

In the Declaration of Independence, we read: "That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed"; and it *doesn't* say "from the majority of the governed."

That is why we who oppose fluoridation of water supplies maintain that it is the manifest duty of legislatures and city councils to reject all proposals to fluoridate the water, giving as their reason their duty to protect the rights of the individual citizen "from possible tyranny by a misled and thoughtless majority."

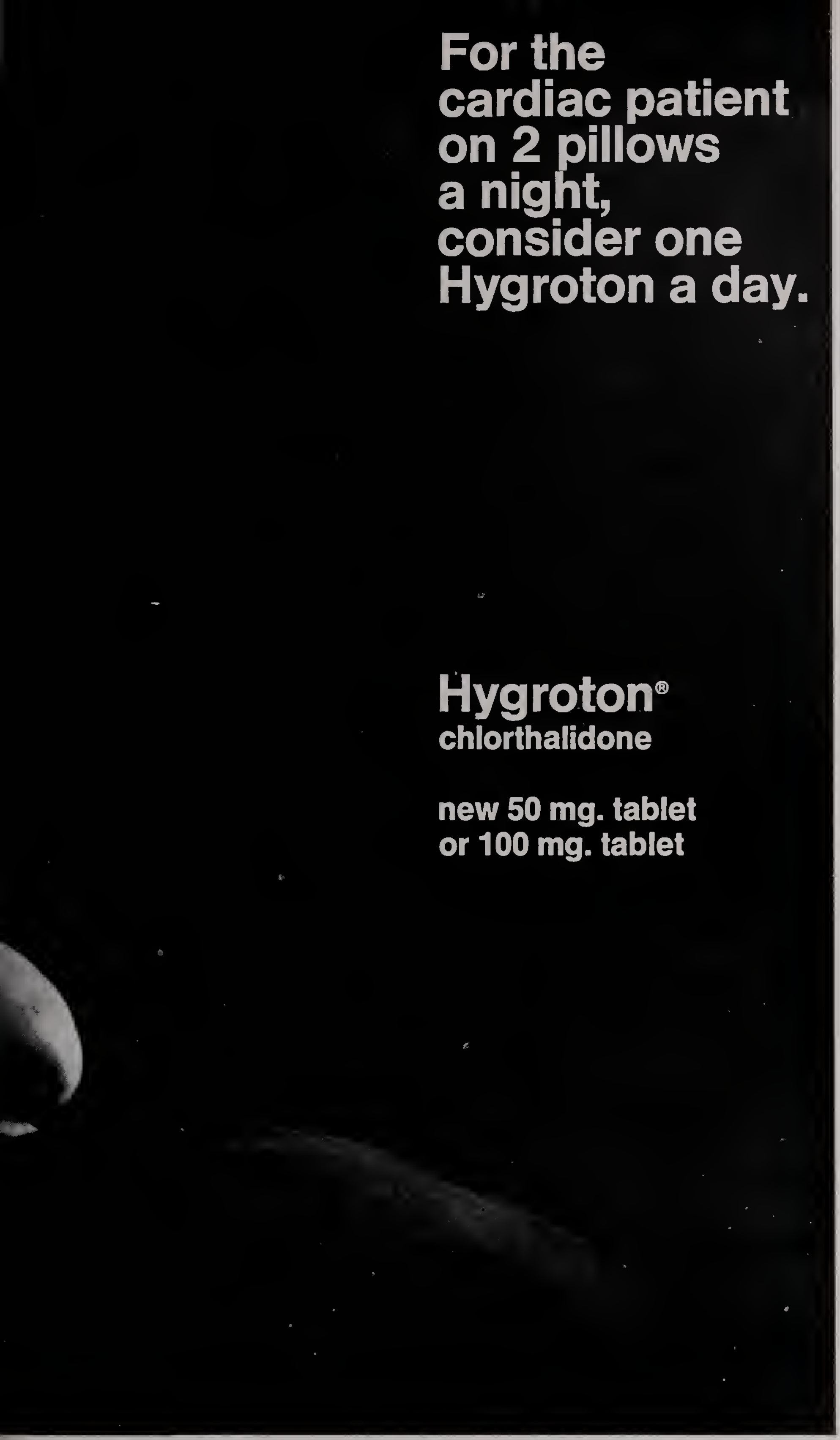
Many people seem to think that if a majority can be persuaded to vote in favor of doing something, it is in line with democracy for that something to be done. This is a gross misconception of the nature of democracy, which is primarily concerned with the rights of people as human beings, and not with the dominance of the majority. A majority vote which violates ethical or moral principles or deprives individuals of rights they should be free to enjoy, is not democracy—it is tyranny. It is a subversion of democracy which will bring democracy to an end in the degree that it is allowed to operate.

Without any question the *first* duty of our elected representatives in our legislatures and city councils is the protection of our basic rights as individuals. High in the list of these is the right of every individual to look after his own body in ways of his own choosing; and the treasured "right to free choice of physician" is merely a corollary of the more basic right to have *no* medical care except what one freely chooses to accept. Adding fluoride, or any other drug, to the water supply is a direct violation of that right.

F. B. EXNER, M.D.

correspondence continued on page 1186

Indications: Hypertension and many types of edema involving retention of salt and water.
Contraindications: Hypersensitivity and most cases of severe renal or hepatic disease.
Warning: With the administration of enteric-coated potassium supplements, which should be used only when adequate dietary supplementation is not practical, the possibility of small bowel lesions (obstruction, hemorrhage, and perforation) should be kept in mind. Surgery for these lesions has frequently been required and deaths have occurred. Discontinue enteric-coated potassium supplements immediately if abdominal pain, distention, nausea, vomiting, or gastrointestinal bleeding occur.
Use with caution in pregnant patients, since the drug may cross the placental barrier and adverse reactions which may occur in the adult (thrombocytopenia, hyperbilirubinemia, altered carbohydrate metabolism, etc.) are potential problems in the newborn.
Precautions: Antihypertensive therapy with Hygroton should always be initiated cautiously in postsympathectomy patients and in patients receiving ganglionic blocking agents or other potent antihypertensive drugs, or curare. Reduce dosage of concomitant antihypertensive agents by at least one-half. Barbiturates, narcotics or alcohol may potentiate hypotension. Because of the possibility of progression of renal damage, periodic determination of the BUN is indicated. Discontinue if the BUN rises or liver dysfunction is aggravated. Hepatic coma may be precipitated.
Electrolyte imbalance, sodium and/or potassium depletion may occur. If potassium depletion should occur during therapy, Hygroton should be discontinued and potassium supplements given, provided the patient does not have marked oliguria.
Take special care in cirrhosis or



For the cardiac patient on 2 pillows a night, consider one Hygroton a day.

Hygroton®
chlorthalidone

new 50 mg. tablet
or 100 mg. tablet

She was the picture of arteriosclerotic heart disease in failure.
She couldn't sleep a wink without an extra pillow.
Then her doctor prescribed digitalis and Hygroton.

First, her cardiac output improved.
Then her breathing improved — along with her urinary output.

Nights could be a lot more pleasant for patients like this in your practice.
Try it and see.

Hygroton therapy may also mean troublesome side effects for certain patients.
A summary of essential prescribing Information is shown below.

severe ischemic heart disease and in patients receiving corticosteroids, ACTH, or digitalis. Salt restriction is not recommended.
Adverse Reactions: Nausea, gastric irritation, vomiting, anorexia, constipation and cramping, dizziness, weakness, restlessness, hyperglycemia, hyperuricemia, headache, muscle cramps, orthostatic hypotension, aplastic anemia, leukopenia, thrombocytopenia, agranulocytosis, impotence, dysuria, transient myopia, skin rashes, urticaria, purpura, necrotizing angiitis, acute gout, and pancreatitis when epigastric pain or unexplained G.I. symptoms develop after prolonged administration. Other reactions reported with this class of compounds include: jaundice, xanthopsia, paresthesia, and photosensitization.
Average Dosage: 50 or 100 mg. with breakfast daily or 100 mg. every other day.
Availability: White, single-scored tablets of 100 mg. and aqua tablets of 50 mg., in bottles of 100 and 1000.
(B)R46-230-D
For full details, please see the complete prescribing information.

Geigy

Geigy Pharmaceuticals
Division of
Geigy Chemical Corporation
Ardsley, New York 10502
HY-5405S

If hypothyroidism leaves your patient feeling like this...

consider

LETTER®

(SODIUM LEVOTHYROXINE, ARMOUR) TABLETS

Synthetic Thyroid Replacement Therapy

Letter® provides all the advantages of the synthetically pure chemical sodium levothyroxine. Dosage is precise and potency is consistently uniform.

and

Letter® is micronized to provide maximum opportunity for full absorption and clinical response.

In addition Letter® is distinctively color coded with an identifying number stamped on each tablet to provide accurate dosage control.

Indications: Hypothyroid conditions. **Contraindications:** Thyrotoxicosis, acute myocardial infarctions unless associated with hypothyroidism. In hypothyroidism with hypoadrenalism coadministration of corticoids with LETTER® is recommended. **Precautions and Side Effects:** Excessive dosage may result in diarrhea, cramps, palpitation, nervousness, rapid pulse, sweating. If symptoms appear, discontinue medication for several days, then reinstitute at a lower level. Since myxedema patients with heart disease may suffer seriously from abrupt increases in dosage, caution should be exercised in adjusting dosage. **Dosage:** Generally, the initial adult dosage is 0.1 mg. daily. This may be increased in small increments every one to three weeks until proper metabolic balance is achieved. **Available:** Bottles of 100 tablets, in six potencies: 0.025 mg. (violet), 0.05 mg. (peach), 0.1 mg. (pink), 0.2 mg. (green), 0.3 mg. (yellow), and 0.5 mg. (white).

ARMOUR PHARMACEUTICAL COMPANY · CHICAGO, ILLINOIS

"Man's best friend" in wintertime diarrheas

In winter "flu" and viral gastroenteritis, Donnagel (4 oz. size!) can bring aid and comfort to sufferers from both diarrhea and its discomforts because it contains kaolin and pectin *plus* belladonna alkaloids (as in Donnatal®). Donnagel treats the whole diarrhea problem. Available on your prescription or recommendation.

For acute, non-specific diarrheas
Donnagel® -PG (Donnagel with paregoric equivalent).
Donnagel formula plus powdered opium, USP, 24.0 mg. (equivalent to paregoric 6 ml.) (warning: may be habit forming). Alcohol, 5%.

All the antidiarrheal benefits of paregoric without the unpleasant taste. Real banana flavor makes it acceptable, even to children. See product literature before prescribing.

A. H. Robins Company
Richmond, Va. 23220

A·H·ROBINS

CLEAR
THE TRACT!
ROBITUSSIN

THERE'S A FORMULATION FOR EVERY COUGHING NEED

All the Robitussins contain glyceryl guaiacolate, the outstanding expectorant agent that greatly increases the output of lower respiratory tract fluid. Increased RTF volume exerts a demulcent effect on the tracheo-bronchial mucosa, promotes ciliary action, and makes thick, inspissated mucus less viscid and easier to raise.

For coughs of colds and "flu"
ROBITUSSIN®
Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.

Alcohol, 3.5%

For unproductive allergic coughs
ROBITUSSIN® A-C
Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
Pheniramine maleate	7.5 mg.
Codeine phosphate	10.0 mg.

(warning: may be habit forming)
Alcohol, 3.5%

Non-narcotic for 6-8 hour cough control
ROBITUSSIN®-DM
Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
Dextromethorphan hydrobromide .	15.0 mg.

Alcohol, 1.4%

New! Clears sinuses and nasal stuffiness as it relieves cough
ROBITUSSIN®-PE
Each 5 cc. contains:

Glyceryl guaiacolate	100 mg.
Phenylephrine hydrochloride . . .	10.0 mg.

Alcohol, 1.4%

	ROBITUSSIN	ROBITUSSIN A-C	ROBITUSSIN-DM	ROBITUSSIN-PE
EXPECTORANT	●	●	●	●
DEMULCENT	●	●	●	●
COUGH SUPPRESSANT		●	●	
ANTIHISTAMINE		●		
LONG-ACTING (6-8 HOURS)			●	
NASAL, SINUS DECONGESTANT				●

PHOTO BY VICTOR HAND

A. H. Robins Company, Richmond, Va. 23220

A-H-ROBINS

An uncommon steroid for common inflammatory dermatoses

In everyday topical steroid therapy, Synalar produces rapid resolution of inflammation and itching in steroid-responsive dermatoses—and at relatively low cost to the patient.

Advanced molecular design enhances potency

Synalar combines the advantage of earlier corticosteroid compounds with unique structural innovations. As a result, preparations of Synalar 0.01% and Synalar 0.025% have been reported to be more potent topically and significantly more effective than hydrocortisone 1.0%. The unique fluocinolone acetonide molecule provides one of the most useful topical corticosteroids for everyday practice.

Impressive clinical results in a wide range of dermatologic problems

The clinical efficacy of Synalar has been extensively documented in the world literature. Commonly encountered diseases such as allergic and contact dermatitis, eczematous and seborrheic dermatitis, and neurodermatitis respond rapidly to Synalar, often where previous therapy with other topical corticosteroids has failed.

Low patient cost for wider usefulness

With Synalar, a high degree of efficacy does not mean high price. And—a small quantity goes a long way. Thus, your patients can often obtain the "economy" of a hydrocortisone preparation with the proved efficacy of a potent, truly advanced steroid.

Synalar®
fluocinolone acetonide

Turn page for contraindications, precautions and side effects.

For everyday topical steroid therapy
Synalar® 0.01%
fluocinolone acetonide
provides economy in two practical dosage forms

For general use, the most economical and widely applicable concentration of Synalar is 0.01% Cream in a water-washable, vanishing cream base. Synalar Solution 0.01% is especially valuable in dermatoses involving moist, intertriginous areas or hairy sites where creams and ointments do not spread or penetrate readily. Synalar Solution is a unique dosage form—clear, nongreasy, cosmetically elegant.

Product Information

Contraindications: Tuberculous, fungal, and most viral lesions of the skin (including herpes simplex, vaccinia, and varicella). Not for ophthalmic use. Contraindicated in individuals with a history of hypersensitivity to any of the components. *Precautions:* Synalar preparations are virtually nonsensitizing and nonirritating. However, the solution may produce burning or stinging when applied to denuded or fissured areas. In some patients with dry lesions, the solution may increase dryness, scaling or itching. Where severe local infection or systemic infection exists, the use of systemic antibiotics should be considered, based on susceptibility testing. While topical steroids have not been reported to have an adverse effect on pregnancy, the safety of their use on pregnant females has not absolutely been established. Therefore, they should not be used extensively on pregnant patients, in large amounts, or for prolonged periods of time. *Side Effects:* Side effects are uncommon with topical corticosteroids. As with all drugs, however, a few patients may react unfavorably to Synalar under certain conditions. In such cases the agent should be discontinued and appropriate measures taken. *Availability:* Synalar (fluocinolone acetonide) Cream 0.025%—5, 15 and 60 Gm. tubes and 425 Gm. jars. Cream 0.01%—15, 45 and 60 Gm. tubes and 120 Gm. jars. Solution 0.01%—20 and 60 cc. plastic squeeze bottles. Ointment 0.025%—15 and 60 Gm. tubes. Neo-Synalar® (neomycin sulfate 0.5% [0.35% neomycin base], fluocinolone acetonide 0.025%) Cream – 5, 15 and 60 Gm. tubes.

fluocinolone acetonide – an original steroid from

SYNTEX

LABORATORIES INC. PALO ALTO, CALIF

DORSEY "FLU-GRAM"

DON'T BE LULLED BY RELATIVE LACK OF FLU LAST WINTER. THIS WINTER BE PREPARED: WHEN THE COMPLAINTS ARE COUGH AND CONGESTION, YOU CAN RELIEVE THESE SYMPTOMS WITH TUSSAGESIC TABLETS. ONE TIMED-RELEASE TABLET AT MORNING, MIDAFTERNOON AND BEDTIME BRINGS UP TO 24 HOURS' RELIEF FROM TROUBLESOME COUGH AND STUFFED AND RUNNY NOSE. TUSSAGESIC IS THE FAMOUS TRIAMINIC FORMULA, PLUS THREE OTHER PROVED CONSTITUENTS. MAKES PATIENTS MORE COMFORTABLE. FAST. ASK YOUR DORSEY REPRESENTATIVE FOR SUPPLY OF STARTER SAMPLES, OR IF FLU IS ALREADY EPIDEMIC, PHONE COLLECT. SEE BELOW.

each

Tussagesic®

timed-release tablet contains:

Triaminic®	50 mg.
(phenylpropanolamine hydrochloride 25 mg., pheniramine maleate 12.5 mg., pyrilamine maleate 12.5 mg.)	
Dextromethorphan hydrobromide	30 mg.
Terpin hydrate	180 mg.
Acetaminophen	325 mg.

Dosage: Adults—1 tablet, swallowed whole to preserve timed-release feature, in morning, midafternoon and at bedtime. Side effects: Occasional drowsiness, blurred vision, cardiac palpitations, flushing, dizziness, nervousness or gastrointestinal upsets. Precautions: The patient should be advised not to drive a car or operate dangerous machinery if drowsiness occurs. Use with caution in patients with hypertension, heart disease, diabetes or thyrotoxicosis.

DORSEY LABORATORIES
a division of the Wander Company
Lincoln, Nebraska 68501

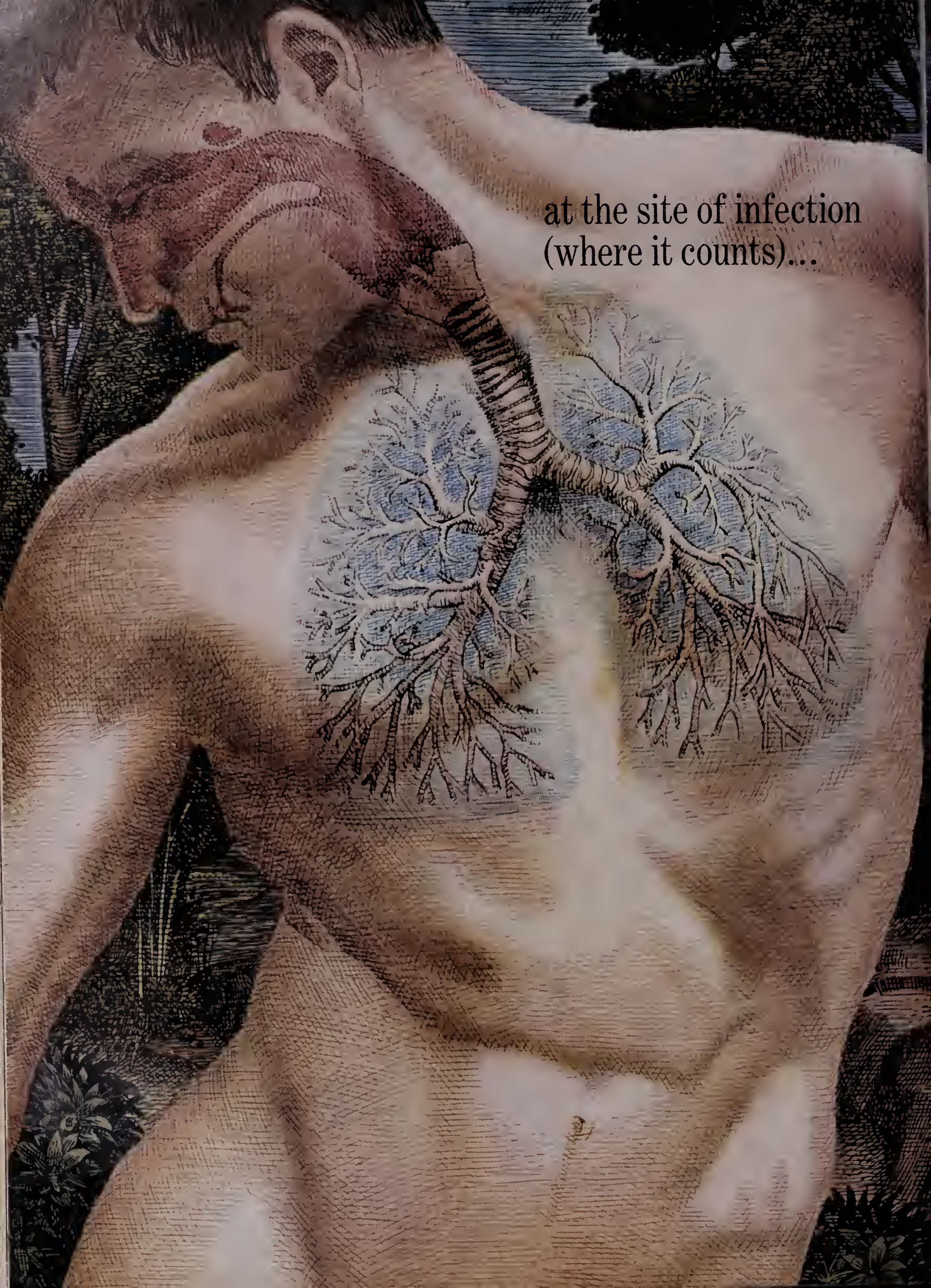
clip and file under "flu"

For relief of "flu-like" symptoms
Tussagesic timed-release tablets

PHONE COLLECT

For emergency starter samples
to Keith Sehnert, M.D.
Medical Director
(402) 434-6311

Fast delivery by your Dorsey
Representative


at the site of infection
(where it counts)...

Ilosone® provides more antibacterial activity than any other oral erythromycin

Acid stable, better absorbed . . . Ilosone produces faster, higher, more prolonged blood levels, even in the presence of food[1-3]

Because it is the most active form of oral erythromycin, Ilosone can help assure consistently greater antibacterial activity at the site of infection. Ilosone produces peak antibacterial blood levels two to four times those of other erythromycin preparations.[1,2] Not only are these levels attained earlier, but they are maintained for much longer periods. Even the presence of food does not seem to affect the activity of Ilosone.[1,3]

In the treatment of patients with bacterial infections susceptible to erythromycin, Ilosone has compiled an excellent therapeutic record. Since it exerts its greatest activity against gram-positive organisms, it is particularly useful in common respiratory and soft-tissue bacterial infections. Ilosone kills—not merely inhibits—streptococci, pneumococci, and more strains of staphylococci than any other macrolide antibiotic. This bactericidal action, coupled with the high antibacterial levels attained, makes Ilosone especially valuable in patients with low host resistance, such as infants, debilitated individuals, and diabetics.

Ilosone has shown no cross-resistance with penicillin and may be effective against organisms that have become resistant to that agent. Despite its high antibacterial activity, Ilosone has demonstrated a low incidence of side reactions. Blood dyscrasias, ototoxicity, and tooth staining have not been observed. Infrequent cases of drug idiosyncrasy, manifested by a cholestatic jaundice, have occurred, but there have been no known definite residual effects.

Now available:
New! Ready-mixed Ilosone Liquid 125! (Contains erythromycin estolate equivalent to 125 mg. erythromycin base per 5-cc. teaspoonful.)

701464

Ilosone®
Erythromycin Estolate

Lilly

(See next page for prescribing information.)

Ilosone®/the most active oral form of erythromycin

Description: Ilosone is the most active form of oral erythromycin that has been developed. Because it is stable in acid, well absorbed, and excreted in lesser amounts in the bile, it provides faster, higher, and longer-lasting levels of antibacterial activity (ABA) in the serum, even when taken with food, than do comparable doses of erythromycin.

Indications: Ilosone is indicated in infections caused by micro-organisms sensitive to its action—especially staphylococci, hemolytic streptococci, and pneumococci.

It has been effective in streptococcus infections, particularly acute bacterial pharyngitis and tonsillitis; staphylococcus disease, including soft-tissue infections, furunculosis, abscesses, cellulitis, carbuncles, and wound infections; pneumococcus pneumonia and acute bronchitis with pneumococci on culture, bronchopneumonia, and otitis media.

In serious staphylococcus infections, erythromycin preparations should be used only in combination therapy with other antimicrobial agents; surgical procedures should be performed when indicated, and large doses of the antimicrobial agents should be employed.

Penicillin is the drug of choice for syphilis and gonorrhea, but Ilosone in multiple 500-mg. doses has been useful in patients with a history of penicillin allergy. Also, other infections due to susceptible bacteria in patients hypersensitive to penicillin or other antibiotics may be considered for treatment with Ilosone.

Contraindications: Known history of sensitivity to this drug; preexisting liver disease or dysfunction.

Adverse Reactions: Hepatic dysfunction with or without clinical jaundice has been reported infrequently. Changes in liver function tests indicative of intrahepatic cholestasis appear to be the result of individual idiosyncrasy. Findings subsided when treatment was discontinued. Occasionally, symptoms simulated extrahepatic obstructive jaundice or the colic of biliary tract disease.

When jaundice appeared to be related to use of the drug, laboratory findings were characterized by increased direct-reacting bilirubin, elevated alkaline phosphatase levels, negative or weakly positive cephalin flocculation and thymol turbidity tests, elevated serum glutamic oxalacetic transaminase levels, peripheral eosinophilia, and normal cholecystograms.

Gastro-intestinal disturbances not associated with hepatic effects and occasional allergic manifestations (urticaria, skin eruptions, and, rarely, anaphylaxis) have been reported. The normal intestinal gram-negative bacterial flora is not appreciably altered by erythromycin drugs.

Administration and Dosage: Ilosone is administered orally.

Infants and children under twenty-five pounds, 5 mg. per pound every six hours; twenty-five to fifty pounds, 125 mg. every six hours. Adults and children over fifty pounds, 250 mg. every six hours.

For severe infections, double the dosage. When larger doses are indicated, consider parenteral erythromycin therapy. In beta-hemolytic streptococcus infections, maintain treatment for ten days to prevent rheumatic fever or glomerulonephritis.

In syphilis, a total of 20 to 30 Gm. is administered in divided doses for ten to fifteen days. Close follow-up is necessary since erythromycin drugs have not had adequate evaluation in all stages of syphilis. Examination of spinal fluid is recommended during follow-up.

In gonorrhea, the dosage is 500 mg. four times a day for four days. Patients with a suspected lesion of syphilis should have a dark-field examination before receiving antibiotics and monthly serologic tests for three months. For detailed information, consult the package literature.

How Supplied: Pulvules® Ilosone, Capsules, N.F., 125 mg.* and 250 mg.*

Ilosone Liquid 125, Oral Suspension, U.S.P., 125 mg.* per 5-cc. teaspoonful.

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References: 1. Griffith, R. S., and Black, H. R.: Am. J. M. Sc., *247*:69, 1964. 2. Griffith, R. S., and Black, H. R.: Antibiotics & Chemother., *12*:398, 1962. 3. Hirsch, H. A., Pryles, C. V., and Finland, M.: Am. J. M. Sc., *239*:198, 1960.

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An Opportunity for Northwest Physicians

A number of years ago Allan B. Kline, then president of the Farm Bureau, said, "If you can do it yourself, you had better do it yourself and not let government do it. If government must do it, you had better let state or local government do it. You can see them better."

This is the principle being followed by Donal R. Sparkman and his committee as they build the organization described in his special article beginning on page 1124. What Dr. Sparkman reports is a singularly effective organization built carefully to meet needs and to comply with desires of those in a specific area. The present plan is locally conceived, locally developed, and locally controlled. Effectiveness will be measured in local gains.

Public Law 89-239, under which regional programs are being developed, was not designed to take responsibility out of the hands of physicians or to impose bureaucracy on the practice of medicine. Rather than to create treatment centers, the present plans are devoted to dissemination of information to the end that all physicians may be kept abreast of developing knowledge. As a prime disseminator of information, this journal expects to support and assist the regional medical programs in their efforts to be helpful to physicians who practice in Oregon, Washington, Idaho and Alaska. ■

H. L. H.

Dental Caries

If one argument could be eliminated, a great deal could be done about the problem of dental caries. On the record, nothing much has been done for fifteen years, except to revive the argument from time to time. Neither proponents nor opponents of a single procedure seem willing to abandon argument long enough to establish a positive program such as proposed fifteen years ago by this journal.

Reconsideration has been prompted by a letter published in the correspondence section of this issue. It should be considered calmly but probably will not be. It carries the name of the halogen associated with the perennial argument and is signed by the physician known best for his opposition to the questioned procedure. The name of the halogen and the name of the physician both seem capable of putting into operation a sort of Gresham's law of argumentation—bad thinking drives out good. Emotionalism makes clear thinking all but impossible.

It is most unfortunate that the energy of discussion has been applied largely to a procedure and hardly at all to dental caries. Certainly little has been done by either side to create alternatives. The disease continues. Both sides have failed. Unwilling to end a fruitless argument, they have, in a sense, blocked progress in control of a condition for which there are many preventive measures. A plague on both of their houses. Let more reasonable men take over.

Those sincerely interested in doing something positive about dental caries, those fed up with recurring feuds, those who can consider the problem without emotionalism, might reconsider a program of public education to include the principles proposed fifteen years ago:[1]

> The story which must be carried to the public should include all known methods of caries prevention. Such a program can become vastly superior in final results to the false sense of security engendered by putting a chemical in the water supply. It is a story which can be told only through intelligent advice, given by professions fully cognizant of their public responsibilities.
>
> Such a broad scale program should include the following points:
>
> 1. The dental profession and the medical profession should pool all current knowledge and determine all facts to be presented to the public. This must be preceded by free and unhampered discussion.
> 2. Voluntary methods only should be presented. These must include information on diet and hygiene and could possibly include use of fluoride by those desiring it.
> 3. Long-range program of public education should be planned and put into operation. Announcement of studies in progress should be released as soon as possible to prevent further loss of time.
> 4. Cooperation of schools should be obtained, even to the point of establishing facilities for tooth cleansing after school lunch periods.
> 5. P.T.A.'s should be brought into the program after they have been shown advantages of the voluntary way.
> 6. Cooperation of manufacturers of candy, soft drinks and other products incorporating refined carbohydrates should be sought after they have been shown advantages of enlightened self-interest in promotion of their products.
> 7. Approval of public health departments should be obtained. Cooperation should not be desired since this is a matter of professional care of individuals and is not properly in the field of public health. ■

H. L. H.

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[1] Editorial, Fluoride debate has set the stage, Northwest Med 51:299 (April) 1952.

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Atrial Pacing in Cardiac Surgical Management

A Preliminary Report

R. DONALD WOODSON, M.D., Chicago, Illinois

A simple technique for unipolar intracavity atrial pacing has been used in fifteen cardiac surgical patients at the University of Oregon Medical School Hospital. Postoperative cardiac output was augmented by an average of 27 percent above intrinsic values, whereas ventricular pacing at the same rate caused an average drop in output of 6 percent. Atrial pacing also proved useful in eliminating a variety of troublesome arrhythmias, and is currently used routinely during the early postsurgical period on this service.

The problem of maintaining post-operative rhythm stability and optimum cardiac output in the patient with acquired heart disease is common to all surgical disciplines. This report details the previously undescribed use of atrial pacing in meeting that problem.

Despite Harvey's early recognition of the significance of the atria in maintaining cardiac output[1], the quantitive effect of a synchronously contracting atrium in raising ventricular end-diastolic pressure and stroke volume and aiding atrio-ventricular valve closure has been appreciated for little more than half a century.[2-8] Recent laboratory and clinical studies have underscored these concepts[9-19] and suggest an even greater atrial role in the diseased heart.[20-21] Meanwhile, although multiple techniques for electrical pacing of the ventricles have evolved,[22] the use of atrial pacing has been confined to laboratory and clinical studies of hypothermic arrest, atrio-ventricular block, and paired atrial pacing,[23-26] and recently to the control of ventricular irritability.[27-30] At the same time, a simple bedside technique for insertion of a flow-guided transvenous electrode into the heart under electrocardiographic monitoring has been developed for detection of intracardiac shunts,[31] EKG identification of complex arrhythmias,[32] and unipolar ventricular pacing.[33] [34] With this trivalent background of evidence of (1) the importance of synchronous atrio-ventricular contraction; (2) the feasibility of atrial pacing; and (3) the clinical practicability of a simple percutaneous technique for insertion of an atrial electrode, the present study suggests only a logical progression in expanding our clinical capability.

method

The study group is comprised of fifteen patients who recently underwent surgery for acquired heart disease at the University of Oregon Medical School. Their ages, clinical functional classification, primary diagnoses, dominant EKG and chest x-ray findings, and operative procedures are shown in Table 1.

All patients had intracavitary atrial pacing electrodes inserted, either transvenously, or transmurally at surgery. In the transvenous technique (equipment shown in Figure 1) the electrode is inserted into the right external jugular vein, either percutaneously through a 16 gauge plastic needle or via cutdown, and easily advanced under electrocardiographic monitoring into the right atrium, Figure 2. Experience has shown the optimal pacing position to be in the upper atrium. If the wire is advanced too far, pacing will not occur or will require excessive voltage (in which case diaphragmatic pacing may occur). This lead is attached to the negative pole of a variable-rate battery-powered pacemaker, and the positive pole attached to an insulated stainless steel suture which has been sewn to the right lateral chest. In the absence of atrial flutter or fibrillation or atrioventricular block, pacing is then possible, setting the battery at 3.5 - 8 ma and the rate at least 5-10 beats per minute faster than the patient's intrinsic rate to avoid competitive rhythms. A patient with wires and battery in place is shown in Figure 3.

When preoperative pacing is unnecessary and operative exposure permits, the intracavitary wire is inserted transmurally through the atrio-

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Submitted while Dr. Woodson was a resident in cardiopulmonary surgery at the University of Oregon Medical School, Portland, Oregon.

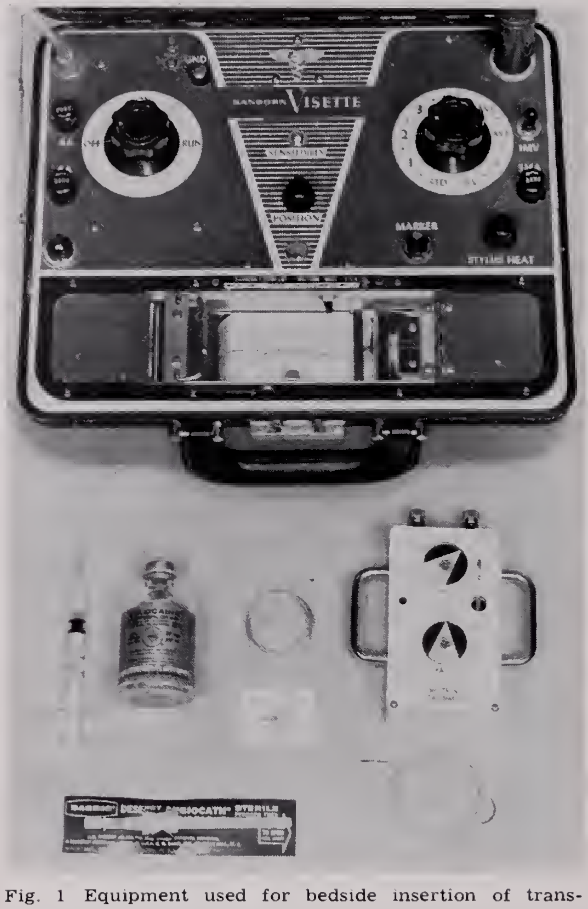

Fig. 1 Equipment used for bedside insertion of transvenous atrial pacing electrode.

caval junction at the time of surgery. A standard Teflon-insulated multistrand stainless steel lead is employed, with no more than 1mm of exposed wire at the tip to maintain high current density at the pacing site. The tip is inserted two centimeters into the upper right atrium; minor adjustments may occasionally be necessary to permit pacing at the lowest possible amplitude (usually 1.5-3.5 ma). An indifferent epicardial electrode is sewn to the mid-portion of the interatrial groove, and both wires brought out through the incision. Postoperatively, intrinsic rhythm and rate are checked periodically by briefly turning off the pacer, permitting evaluation of Isuprel and digitalis requirements. By connecting the intracavitary wire to the V-lead of an electrocardiograph, the intra-atrial EKG, with its prominent P-waves, may be used to easily differentiate atrial fibrillation or flutter from sinus or nodal tachycardia, Figure 4. Monitoring equipment must be carefully grounded and electrode leads insulated to prevent induction of fibrillation.[35]

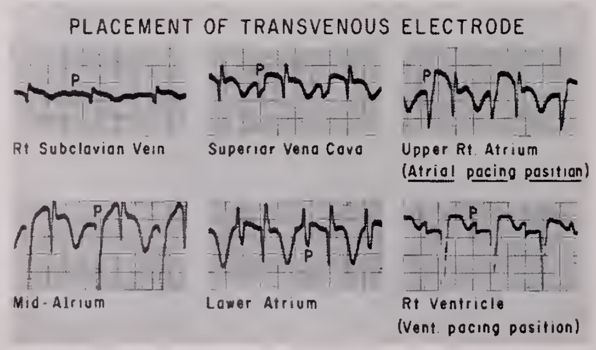

Fig. 2

All patients also had epicardial ventricular pacing wires inserted at surgery. During the first 72 hours after operation, RISA cardiac output studies after the method of Kloster were performed to compare intrinsic output with that during atrial and ventricular pacing at a faster rate.[36]

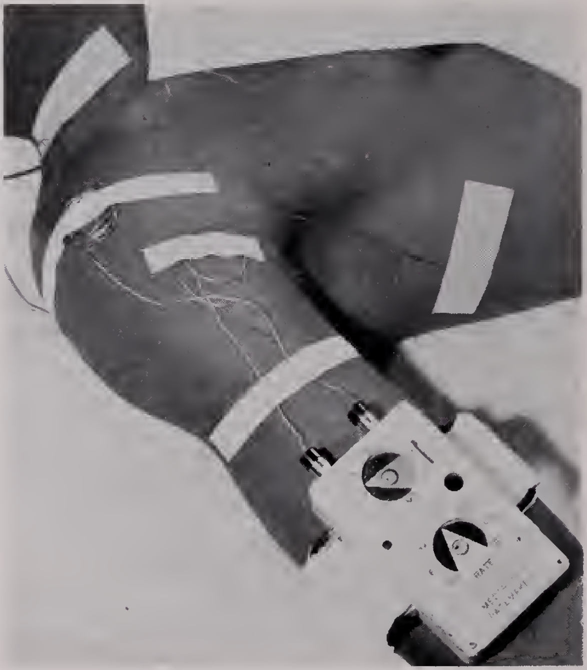

Fig. 3 Postoperative patient with transvenous atrial pacing electrode in place.

results

Cardiac indices during atrial pacing showed an average increase of 27 per cent (-1to 71 per cent) over intrinsic index, while ventricular pacing produced an average drop of 6 per cent (-40 to 66 per cent), Table 1. Pacing was continued until the intrinsic rhythm was sinus and stable at 90/min or better, or until the onset of atrial fibrillation. Average duration of pacing was 3.5 days. Three patients maintained a stable sinus

TABLE 1

Patient Summary

Patient	Age	Primary Cardiac Diagnosis	Functional Class	EKG Diagnosis	Cardiac Enlargement by X-ray	Operation	Intrinsic Rhythm	Rate/ min.	Cardiac Index (1/min./m^2)	Pacer Rate/min.	%ΔCI(AP)	%ΔCI(VP)
1	40	M.S., A.S.	II	LVH	LV, RV, LA	Open Commissurotomy	Nodal	90	2.4	100	65	-18
2	40	M.S.	III	Atrial fibrillation	LV, RV, LA	Open Commissurotomy	Nodal	80	2.25	110	62	24
3	36	M.S., T.S.	II	P-Mitrale, ST-T changes	Generalized	Open Commissurotomy	NSR	85	2.06	105	48	- 3
4	44	Coronary ASHD	III	Old infarct	Normal	Vineberg	NSR	85	3.8	120	4	- 7
5	50	Coronary ASHD Ventricular aneursym	IV	Old infarct	Generalized	Aneurysmectomy	NSR	100	1.85	120	7	-20
6	30	M.S.	II	P-Mitrale, PVC's	LA	Open Commissurotomy	Nodal	70	0.9	110	71	66
7	36	Coronary ASHD	II	LVH, ST-T changes	Normal	Vineberg	NSR*	115	4.1	130	-1	-40
8	32	M.S., M.I.	II	P-Mitrale, LVH; previous atrial fibrillation	LV, LA	Valve replacement	NSR*	100	2.3	110	29	-24
9	46	A.I.	II	LVH	LV	Valvuloplasty	NSR	95	3.0	120	7	-13
10	20	A.I.	III	LVH	LV	Valve replacement	NSR	75	1.1	115	4	-11
11	35	A.I.	II	LVH	LV	Valvuloplasty	NSR	80	3.06	115	11	-17
12	52	Coronary ASHD	II	ST-T changes	Normal	Vineberg	NSR*	115	2.4	125	46	-14
13	55	A.I., M.I.	II	LAH, LVH	LAH, LVH	Double valve replacement	Nodal	70	2.0	100	35	18
14	42	A.S., A.I. M.S., M.I., T.S. T.I.	IV	LVH	LVH, LAH	Triple valve	Nodal	70	1.55	100	11	-22
15	42	Coronary ASHD	II	ST-T changes	Normal	Vineberg	NSR	85	2.7	110	9	-13

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* No postoperative pacing required.

M.S.: Mitral stenosis; M.I.: Mitral insufficiency; A.S.: Aortic stenosis; A.I.: Aortic insufficiency; T.I.: Tricuspid insufficiency; T.S.: Tricuspid stenosis; ASHD: Arteriosclerotic heart disease; LVH: Left ventricular hypertrophy; LAH: Left atrial hypertrophy; NSR: Normal sinus rhythm.

rhythm at 100-110/min from the time of surgery and did not require pacing. Three others developed atrial fibrillation within four days of surgery. Two of these had rapid ventricular rates, and under-digitalization was suspected. A third showed a slow ventricular rate with frequent premature contractions. Her transvenous wire was simply advanced into the ventricle and unipolar ventricular pacing instituted, with prompt elimination of the premature ventricular beats.

Besides augmenting cardiac output, atrial pacing converted to sinus mechanism a variety of troublesome and potentially dangerous arrhythmias, Figure 5. Atrial wires were routinely removed on the seventh postoperative day. No complications referable to pacing or wire removal have been noted.

discussion

The 32 per cent difference in cardiac output found between atrial and ventricular pacing in this study is in accord with previous studies of synchronous and asynchronous atrio-ventricular function.[19, 25] Of greater interest, however, is the observed 27 per cent average augmentation of output over intrinsic supraventricular rhythms at rates above 70/min by atrial pacing at an average rate of 110/min. Benchimol[37] has reported an optimal synchronous rate of 76/min, with falling cardiac outputs above that point. Ross[17] and Starzl[38] found no effect on output when the heart rate was more than doubled by atrial stimulation, and ascribed their results to homeostatic mechanisms acting in the absence of increased metabolic demands. Samet[19] demonstrated maximum cardiac indices at synchronously paced rates of less than 100/min. He also questioned the potential value of a chronically fibrillating atrium converted to sinus rhythm. Although the size of the present study makes conclusions purely speculative, results suggest that elevation of heart rate to 100/min or better, together with optimum synchronization of atrial contraction, can significantly improve cardiac function. This improvement seems particularly noteworthy in the presence of decreased ventricular compliance (from hypertrophy or fibrosis) and nodal rhythm, and is unaffected by a history of atrial fibrillation.

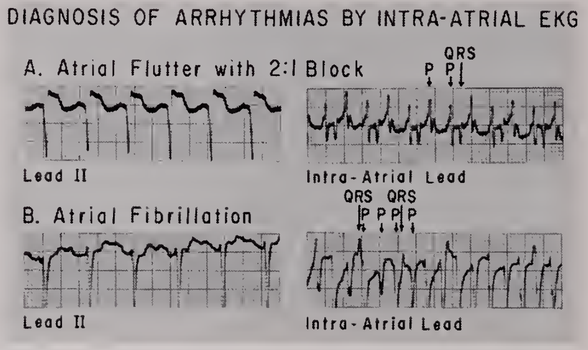

Fig. 4

As important as the effect on cardiac output was the elimination, by atrial pacing, of several troublesome arrhythmias frequently seen in the postoperative period. Supraventricular bradycardia, whether from vaso-vagal reflex, digitalis effect, glassopharyngo-vagal reflex, the "oxygen-conserving reflex" of Wolf,[39] or more obscure mechanisms, may not in itself be dangerous, but in the presence of underlying heart disease may be associated with decreasing cardiac output and development of a more serious arrhythmia.[40] Premature beats impair cardiac synchronicity, and may likewise deteriorate rapidly into tachycardia, flutter, or fibrillation. Nodal rhythms, by negating the atrial contribution to ventricular function, significantly diminish cardiac output.

TABLE 2

Atrial pacing during anesthesia in a patient with severe coronary atherosclerosis.

	Intrinsic Rhythm	Ventricular Pacing	Atrial Pacing
Rate/min	81	110	110
Arterial Blood Pressure (mm Hg):	135/80	80-95/60-65	165/85
Mean Pressure:	88	75	105
End-diastolic Pressure:	79	65-72	87

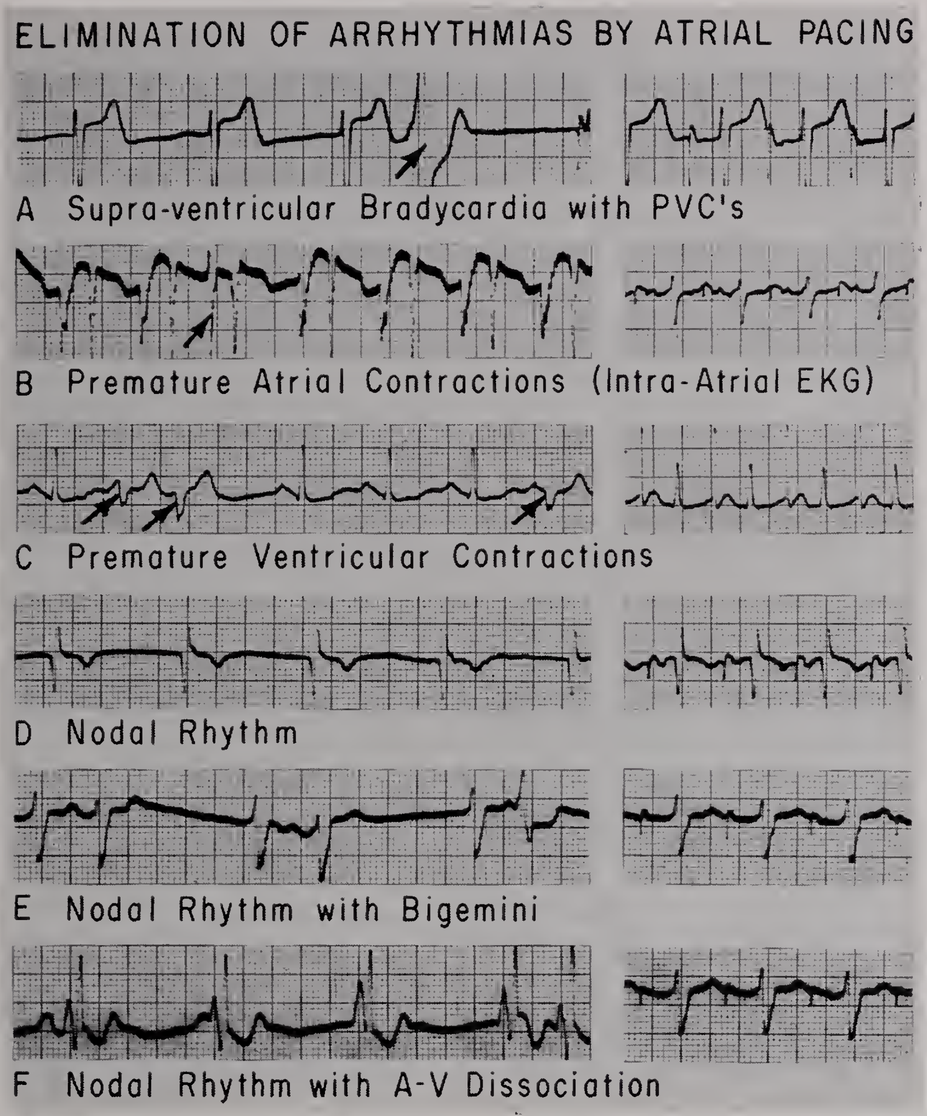
ELIMINATION OF ARRHYTHMIAS BY ATRIAL PACING
A Supra-ventricular Bradycardia with PVC's
B Premature Atrial Contractions (Intra-Atrial EKG)
C Premature Ventricular Contractions
D Nodal Rhythm
E Nodal Rhythm with Bigemini
F Nodal Rhythm with A-V Dissociation

Fig. 5

The simplicity of the transvenous technique has permitted pacing during induction of anesthesia, thereby safeguarding the patient who has impaired coronary perfusion pressure, Table 2.

Atrial pacing has now been employed in more than 50 post-operative cardiac surgical patients at this institution, with no complications noted thus far. The results presented here have led to the routine placement of atrial wires in all such patients; ventricular wires are also implanted, but their use is limited to patients in atrial flutter or fibrillation or in atrio-ventricular block, when bradycardia or premature contractions are present.

summary

A preliminary report of the use of unipolar intracavitary atrial pacing in fifteen cardiac surgical patients is presented. During the initial post-operative period, this technique augmented intrinsic cardiac indices by an average of 27 per cent while simultaneously eliminating several types of troublesome arrhythmias. ■

University of Illinois, Research & Education Hospital (60612)

abstracto

Una técnia simple para colocar un marcapaso unipolar intracavitariamente en la aurícula, ha sido usada en quince pacientes en la facultad de Medicina de la Universidad de Oregon. El flujo cardíaco postoperatoria fue aumentado en un promedio del 27 por ciento sobre los valores intrínsecos, mientras que el marcapaso ventricular a la misma frecuencia causó un descenso en el flujo de un 6 por ciento de media. El marcapaso articular demostró ser util en la eliminación de un conjunto de arritmias difíciles, y es usado rutinariamente durante los primeros estadios postoperatorias en este servicio.

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Burkitt Lymphoma with Leukemia

A Case in Oregon

JAN M. COLLINS, M.D., Portland, Oregon

A case of Burkitt's lymphoma in an 11-year-old female is reported. Tumor of left submandibular gland and of abdominal organs and with terminal leukemia were notable features. Initial response, then resistance to irradiation and cyclophosphamide, resistance to steroids, and a partial response to intra-arterial methotrexate were observed. An attempt to culture virus from this neoplasm was unsuccessful, but antibodies to a Burkitt's tumor antigen were demonstrated.

In 1958 Denis Burkitt reported thirty-eight cases of a sarcoma of the jaws occurring among African children.[1] This tumor was more fully described as a multi-centric lymphoma, or lymphosarcoma, with involvement of abdominal viscera, facial bones, jaw, ovaries, and less frequently spleen and peripheral lymph nodes. The untreated course was rapidly progressive, usually leading to death in six months.[2] Terminal leukemia is uncommon.[3] Histologically, a "starry sky" appearance due to the presence of scattered histiocytes in a field of lymphocytes has been described in the African lymphoma.[4]

Incidence of this tumor among children in Africa is extremely high and constitutes about 50 per cent of all cancers.[5] The localized geographic distribution of this tumor in African regions seems to be related to specific conditions of altitude, temperature, and rainfall and this epidemiologic pattern has suggested an infectious causal agent, spread possibly through an insect vector.

A virus, antigenically related to reovirus,[3] has been cultured from this neoplasm.[6] Since 1958 several cases have been reported occurring outside Africa. Histopathologic characteristics of tumors clinically and histologically resembling Burkitt's lymphoma but occurring in children in the United States were reviewed by O'Conor, et. al.[7] Characteristic features of the lymphoma were similar in Africa and the United States except that the disease occurs much less frequently in the United States and facial bone involvement common in African cases was not found often among United States cases.

case report

An 11-year-old female of Mexican descent, daughter of a migrant farm worker, was born in Pharr, Texas, a town in the lower Rio Grande valley. She and her family moved to St. Paul, Oregon, a small farming community, when she was four years old. She was first admitted to Good Samaritan Hospital on March 14, 1966 because of an enlarging mass present in the left neck for two months. Her previous health had been good. Examination disclosed a huge mass extending from the mastoid process well beyond the midline in the submental space anteriorly. The mass extended down to the middle third of the neck and extended up over the body of the mandible almost to the region of the zygoma. The mass was firm, slightly tender, and fixed to the overlying skin. No other abnormality was detected on physical examination except for her obesity (75 kg). No radiologic abnormality of the mandible or facial bones was noted; the chest x-ray and intravenous pyelogram also were normal. Complete blood count was within normal limits. Biopsy of the tumor was interpreted as showing lymphosarcoma, reticulum cell type. A "starry sky" appearance was described and considered to be compatible with the so-called Burkitt tumor. Because of the apparently localized disease process, radiation therapy with cobalt 60 was administered. Very rapid and complete tumor regression occurred before the course of radiation was completed. She received 3300r over a 29 day period.

She was readmitted to the hospital on April 18, 1966 because of vomiting and abdominal pain. A poorly defined lower abdominal mass and a huge mass filling the left vulva and extending into the pelvis were noted. In addition there was a smaller polypoid mass involving the right labium minorum anteriorly. These laboratory abnormalities were present: total bilirubin 4.6 mg per 100 ml, alkaline phosphatase 40 King-Armstrong units and serum glutamic oxaloacetic transaminase over 250 units. Elevated sedimentation rate and rouleaux formation were noted. Treatment with cyclophosphamide, 50 mg/kg, was given intravenously in divided doses over four days. Rapid regression of abdominal and perineal masses was accompanied by correction of abnormal SGOT, alkaline phosphatase, and bilirubin values and a rise in uric acid to 19.7 mg per 100 ml.

A few days later the white blood count fell to 570. Supportive treatment and prophylactic antibiotics were given until adequate marrow function returned. Cyclic chemotherapy was recommended by a pediatric staff conference. Outpatient treatment was continued with the patient on oral methotrexate for five weeks. The patient missed her fifth weekly appointment and omitted chemotherapy for one week. The following week she returned, and a 3 cm mass was noted in the left submandibular area at the site of her initial tumor. Oral cyclophosphamide was again begun, but in two more weeks the tumor had grown rapidly to approximately 7 cm in diameter.

After her readmission on July 20, 1966 cyclophosphamide was administered intravenously, using a dose of 25 mg/kg. Because of unchecked tumor growth and continued absence of generalized disease, supravoltage radiation again was used. With a seven day course a tumor dose of 1300r was given with no apparent effect on the rapidly growing tumor. A trial of high doses of steroids, 30 mg/day of dexamethasone for four days, seemed to make the tumor slightly softer but no smaller than before. By this time the superior border of the mass nearly reached the orbit, the medial border was well beyond the midline, and the lateral border extended past the mastoid. Tumor biopsy was repeated and specimens were submitted to the Sloan-Kettering Institute and to the University of Oregon Medical School. The histologic appearance was unchanged from the earlier biopsy. Because of the failure of other methods of treatment, it was decided to perfuse methotrexate intra-arterially. A catheter was placed in the left temporal artery and passed in a retrograde manner into the external carotid artery. This catheter was attached to an infusion pump which delivered 25-40 mg/kg of methotrexate daily. Citrovorum factor was given intramuscularly to prevent systemic toxicity of methotrexate.[8] Significant tumor regression was noted for the

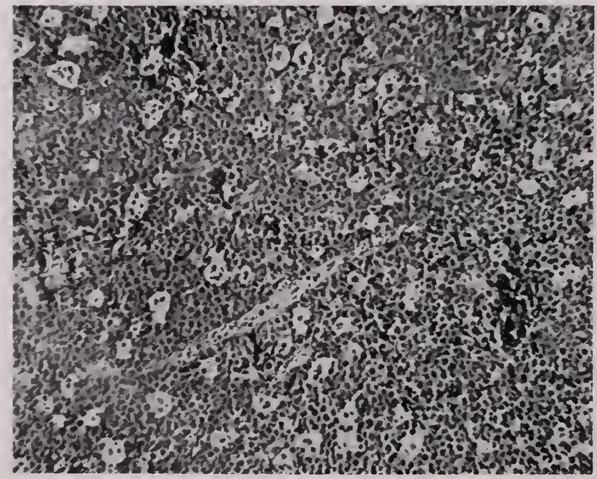

Fig. 1 Section from initial biopsy of mass in left neck, 3-16-66, x-100.

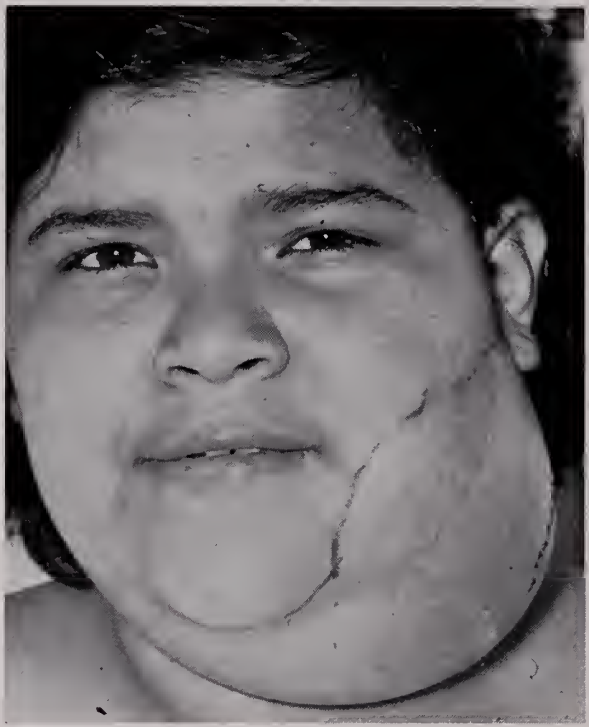

Fig. 2 Patient before initial treatment, 3-17-66.

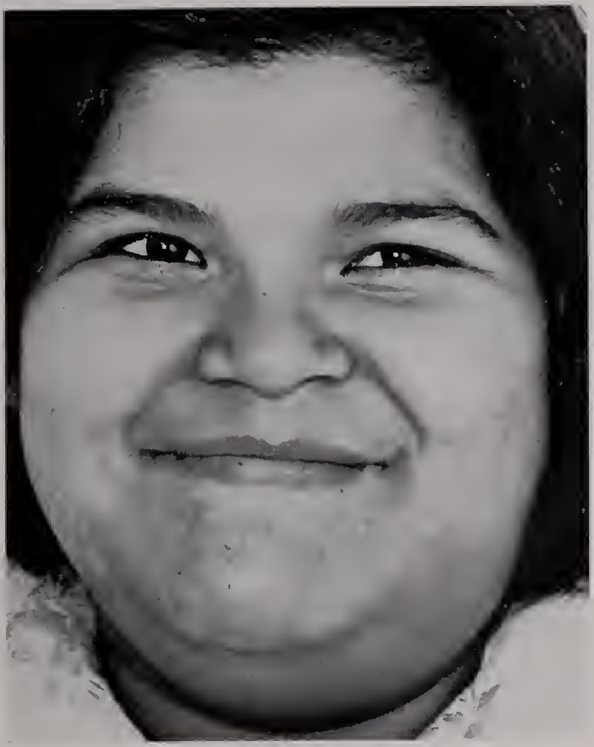

Fig. 3 Patient after six cobalt radiation treatments having received a tumor dose of 1200r, 3-23-66.

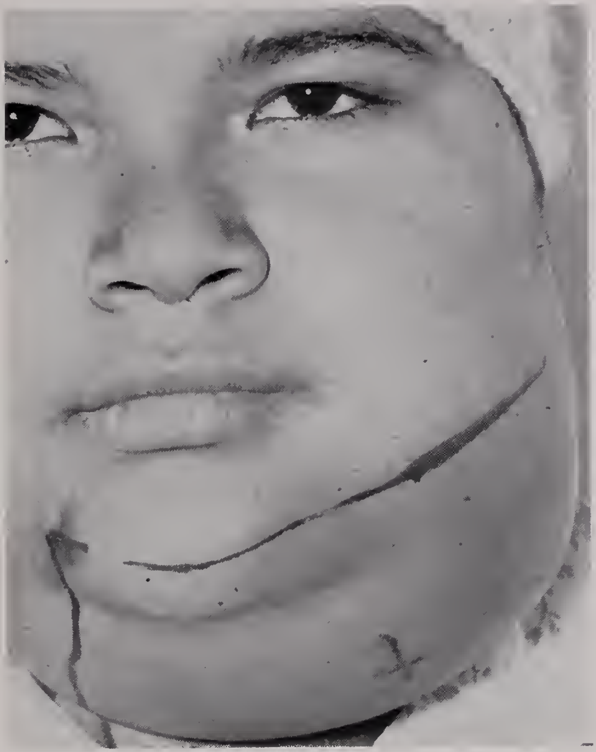

Fig. 4 Patient after recurrence of tumor in left neck, 7-28-66.

first time since this readmission. After eight days leukopenia of 2000 developed and the perfusion was halted. Rapid tumor growth again was observed during a thirteen day pause in chemotherapy. When perfusion was restarted, moderate tumor regression occurred once more. After eleven days of additional perfusion the patient was discovered to have developed right hemiplegia. No backflow of blood came from the arterial catheter and a tentative diagnosis of cerebral artery thrombosis or embolism was made. Supportive measures had little effect and the patient died on September 15, 1966, the 57th hospital day. Terminal blood counts and a bone marrow examination on the day before death revealed changes of acute leukemia, probably lymphocytic in type. Post-mortem examination demonstrated extrinsic occlusion of the left common carotid artery by tumor and resulting encephalomalacia of the left cerebral hemisphere. Tumor was found to have infiltrated the liver, spleen, left kidney and bone marrow.

discussion

Involvement of salivary glands is not a frequent presenting picture with Burkitt's lymphoma but is reported by Wright[2] as occurring in 16 per cent of cases. Direct involvement of jaw or facial bones was absent in this case, but submaxillary gland involvement was thought to be present. Bilateral ovarian involvement, which is said to be as characteristic as jaw involvement, was present clinically before systemic treatment. Diffuse rapid infiltration of many organs suggests a multifocal character for this disease. Terminal acute leukemia is probably much more frequent than the 8 per cent found in Wright's series[2] and could have been easily missed in this case had not blood and marrow examinations been done within two days of death.

chemical nomenclature

generic	trade
methotrexate	Methotrexate
cyclophosphamide	Cytoxan
dexamethasone	Decadron Deronil Dexameth Gammacorten Hexadrol

Several modes of therapy were used in this patient with varying responses. The original submandibular tumor responded completely to irradiation, a class III response by Burkitt's criteria. Later appearing and widespread visceral tumors responded completely to intravenous cyclophosphamide, another class III response. Yet, recurrent tumor was resistant to all previous modes of therapy, did not respond to steroids, and responded only slowly to arterial methotrexate infusion. This diminished response to therapy was not related to any change in histopathology but must have been caused by survival following therapy and exuberant growth of resistant tumor cells.

Antibodies to an antigen prepared from tissue culture of Burkitt's tumor cells were identified in this case at Sloan-Kettering Institute.[9] However, as with other cases of Burkitt's lymphoma in this country, no virus could be cultured from the tumor.[9] This is in contrast with the cases observed in Africa, where positive virus cultures have been reported. These observations would seem to favor the view of Dalldorf, et al,[10] O'Conor, et al,[7] and others who do not accept Burkitt's tumor as an entity but rather regard it as a multifocal, childhood lymphoma with greatly increased African incidence as a result of special environmental factors. ■

Good Samaritan Hospital & Medical Center (97210)

abstracto

Se informa sobre un caso de linfoma de Burkitt en una niña de once años. Hechos notables fueron: tumor de la glándula submaxilar izquierda y de los organos abdominales con leucemia terminal. Se observó una respuesta inicial después, resistencia a la irradación y ciclofosfamida, resistencia a esteroides, y repuesta parcial al metrexato intra-arterial. Un intento para cultivar virus de este neoplasma fue fallido, pero fueron demostrados anticuerpos contra un antigeno del tumor de Burkitt.

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> *The young physicists are beyond all doubt the noisest, rowdiest, most active and most intellectually alert group we have here. For them the world changes every week and they are simply delighted by it. A few days ago I asked one of them, as they came bursting out of a seminar, "How did it go?" "Wonderful!" he said. "Everything we knew about physics last week isn't true!"*
>
> **—Dr. Walter Stewart, economist at the Institute for Advanced Study, Princeton, N.J.**

Altitude Effects on the Human Body

Ultraviolet, Cold, and Low Pressure

Part III, Conclusion

GENE W. MASON, M.D., Everett, Washington

inter-relation of major changes

While it is desirable to know the changes occurring in each body system, perhaps it is more meaningful to be able to inter-relate the major changes that are occurring. See chart.

The low partial pressure of oxygen causes the hypoxemia which is responsible for initiating the chain of physiologic events.

Tachycardia is one of the first responses to hypoxemia, and increases as altitude increases.[35] It is probably responsible for the increase in minute-volume output of the heart above 15,000 ft. However, after acclimatization of four to seven months, Pugh found the stroke volume to be decreased with cardiac output then comparable to sea level values for a given work intensity.[55]

Major System Changes
(within hours or days)

Pulmonary

1. Hyperventilation—starts immediately.
2. Pulmonary hypertension.[37-39]
3. Vascular engorgement.[40, 41]
4. Decreased vital capacity.[40]
5. Increased residual volume.[40]
6. Increased maximal diffusing capacity.[42, 43]

Cardiovascular

1. Tachycardia.
2. Increased cardiac output—above 15,000 ft.[4b]
3. Increased endothelial permeability and exudation.[44]
4. Increased lymphatic flow.[44]

Blood Chemistry

1. Decreased arterial P_{O_2}.[45]
2. Decreased arterial P_{CO_2}.[45, 46]
3. Increased arterial pH (respiratory alkalosis) —early and temporary.[47-49]

Blood Elements

1. Decreased plasma volume (hemoconcentration).[50]
2. Increase in all cellular elements—within hours.[51]
3. Increase in hemoglobin content — within hours.[51]

Erythropoiesis

1. Increased iron uptake by intestine—within hours.[50]
2. Increase in iron turnover rate — after 2 hours.[50]
3. Increased bone marrow activity—within 48 hours.[50]
4. Absolute increase in red cells—in about 8 days.[52]

Urinary System

1. Polyuria.[53]
2. Decrease in urinary pH.[54]

Increased production of blood begins with an increase in iron turnover rate (plasma and red cell) after two hours, increasing to twice normal in less than 12 hours. The intestinal iron uptake becomes three times the sea level absorption, in 48 hours. The first absolute increase in red cells is seen in about eight days, increasing to near maximum in six to eight weeks.[52] The hemoglobin increases 2 per cent per day to near maximum of 50 per cent increase over sea level, in three to four weeks. Wintrobe has pointed out that following a fatiguing climb to high altitude, the response may be much less than usual, perhaps owing to destruction of cells during the prolonged exertion.[56] Hurtado[57] and Talbott[58] have independently observed that when the arterial oxygen saturation reaches a value of about 60 to 70 per cent, a decrease rather than a further increase in hemoglobin and red blood cell count eventually occurs. This would occur at about

20,000 ft. It would appear that hypoxemia ultimately interferes with the production of hemoglobin.

Although there is an increase in all blood cellular elements and hemoglobin content within a few hours, this has been shown to be a result of the decreased plasma volume. This hemoconcentration occurs as a result of the greatly increased fluid losses due to evaporation, and due to the anoxia causing increased endothelial permeability, edema, exudation, and increased lymphatic flow.

The hyperventilation in response to the low Pa_{O_2} which occurs immediately at altitude, lowers the Pa_{CO_2} causing respiratory alkalosis. The fall in Pa_{CO_2} allows a roughly equivalent rise in the Pa_{O_2}. Although the arterial pH is increased initially, it gradually returns to normal as buffering mechanisms and renal compensation occur.

While it has been suggested on a theoretical basis that potassium deficiency may be responsible for some of the symptoms of acute mountain sickness,[59] potassium supplements provided during mountaineering have failed to change the clinical picture.[60] In fact, many foods high in potassium (more than 500 mg per 100 gm) are frequently included in mountaineering diets, e.g.: dried fruit—apricots, currants, dates, figs, peaches, prunes, and raisins; nuts—almonds, Brazil nuts, cashews, peanuts, pecans, and walnuts; cereals—bran and whole grain; cocoa and chocolate.

Hypoxemia and possibly several other factors cause a pulmonary arteriolar vasoconstriction, enormously increasing the pulmonary vascular resistance.[36] It should be noted that this effect of oxygen deficit in the pulmonary circulation is opposite to the effect normally observed in systemic vessels, and its cause remains obscure.

It has been suggested that the pulmonary hypertension improves the perfusion of normally underperfused upper parts of the lungs,[59] supplying alveoli expanded by the hyperventilation. However, this is difficult to understand in view of the pulmonary arteriolar vasoconstriction. The pulmonary vascular congestion actually decreases the vital capacity. A breakdown in the normal acclimatization process heralds the onset of pulmonary edema. The arteriolar constriction of the pulmonary arterioles increases the hypoxia to the pulmonary capillaries causing capillary permeability. This allows blood and plasma to flow into the alveoli, further impeding ventilation. A vicious circle results. Rapid, unacclimatized ascent and physical exertion increase the hypoxemia.

The elevated pulmonary artery pressure is reflected in an increase in central venous pressure, but heart failure is not a part of the picture.[36, 60] It has been demonstrated in dogs that pulmonary edema is aggravated by peripheral vasoconstrictors. The vasoconstricting effect of cold may simulate this.

individual resistance to altitude effects

For many decades of mountaineering the question has been posed, "What parameters can be used to predict altitude tolerance?" While this question still remains unanswered, certain observations become significant.

Altitude tolerance does not seem to be related to body hobitus. Successful mountaineers may be tall or short with heavy or light frames, providing of course, that they are not obese.

Four criteria stand, at least as a starting point, for predicting tolerance to altitude effects. These are: 1. Motivation. 2. Knowledge based on experience. 3. Physical condition. 4. Specific physiology. If a reasonable value could be given to each of these in proper proporation, perhaps a meaningful measure could be elaborated.

While motivation is difficult to assess, it unquestionably plays an extremely important role in how well altitude is tolerated. The interaction of personalities of team members may bear heavily on motivation.

Experience and knowledge of the stresses of altitude will allow an individual to cope with the problems more effectively. A mountaineer who has lived at altitudes in excess of 15,000 ft. has learned how to evade many of the altitude stresses before they become serious problems.

An individual will tolerate altitude effects better if he is in peak physical condition. Resting heart rate, the amount of increase during exercise, and the rapidity of return to the resting state allows a simple measure of physical condition.

Certainly the physiology of an acclimatized individual is better adapted to cope with altitude than an unacclimatized individual. However, in addition, there is reason to suspect that even in unacclimatized people, some are physiologically better able to tolerate altitude. Investigators have spent countless hours searching for the reasons. Barcroft in 1921-22, after an Andean expedition, reported that members with a high diffusion coefficient of oxygen suffered less from mountain sickness than those with a low coefficient.[61] This has subsequently proved of little value.

Velasquez noted that increased tolerance of hypocapnia favors tolerance for hypoxia, since the lower the P_{CO_2}, the higher P_{O_2} at a given altitude.[62]

Investigators reported in 1959 that increased circulating fatty acids cause a decreased oxygen capacity and tension in dogs. Ability to metabolize lipids rapidly was related to altitude tolerance. They postulated that the lipids coated the red blood cells, interfering with oxygen transfer.[63] Epinephrine and norepinephrine increase the circulating fatty acids, perhaps indicating that stress decreases altitude tolerance.

summary

Increases in altitude present four fairly distinct stresses which impinge heavily on the human organism. These are: 1. Decreasing temperature. 2. Increasing ultraviolet radiation. 3. Decreasing barometric pressure. 4. Decreasing partial pressure of oxygen. ■

631 Medical-Dental Bldg. (98201)

Chemical nomenclature

generic	trade
diphenhydramine	Benadryl
prochlorperazine	Compazine
promethazine	Phenergan
tetracycline	Achromycin Panmycin Polycycline Steclin Tetracyn
chlortetracycline	Aureomycin
demethylchlortetracycline	Declomycin
chloroquine	Aralen
hydroxychloroquine	Plaquenil
amodiaquine	Camoquin

abstracto

Incrementos en la altitud presentar cuatro influencias bien distintas que caen pesadamente sobre el organismo humano. Estas son 1. Disminución de la temperatura. 2. Aumento de la radiación ultravioleta. 3. Disminución de la presión barométrica. 4. Disminución de la presión parcial de oxígeno.

El cuerpo pierde normalmente calor via conducción, convección, radiación y evaporación. Varios de estos se acentuan en las alturas especialmente durante el ascenso de montañas. El cuerpo responde a esas pérdidas con una respuesta inicial compensadora y finalmente con una respuesta tardía descompensadora.

El problema mayor de la altura resulta de la baja presión parcial del oxígeno en el aire inspirado, lo que conduce a una baja saturación de hemoglobina. La aparición y la severidad de los signos y síntomas de hipoxia depende de la altitud, el grado de ascención, tiempo que pasa, actividad física y la tolerancia individual. Los síntomas se pueden dividir primariamente en categorias cerebrales y cardiorespiratorias.

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An Opportunity for Northwest Physicians

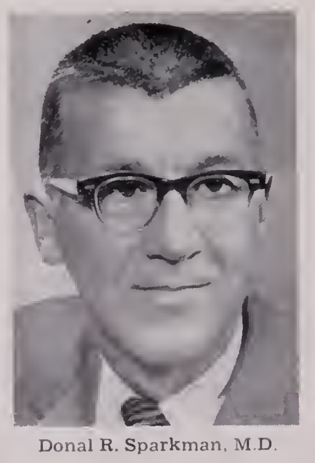
DONAL R. SPARKMAN, M.D., Seattle, Washington

During the past ten years, the Congress has enacted sixty-five major pieces of legislation in the health field. Best known of recent health bills is Medicare, which directly affects the physician's practice. Less known, but with perhaps equal potential for impact on the practice of medicine, is Public Law 89-239, the Regional Medical Program for Heart Disease, Cancer and Stroke, passed by the Congress, October, 1965.

The phrase, *"heart, cancer and stroke"* recalls to many physicians report of the Presidential Commission, headed by Michael DeBakey, and its recommendation for the establishment of centers for research, training and patient care in the killer diseases, which account for 70 percent of all deaths in the U.S.

As a result of the testimony of many physicians before Congressional committees, the bill to implement the commission's recommendation was substantially changed, eliminating the center concept, to provide emphasis on the decentralization of teaching resources and patient care. The law as it emerged has several unusual features which make it unique and attractive to the medical profession. It is not a federal blue-print. Rather, it is a broad concept, providing considerable latitude in implementation. It proceeds on an assumption, unusual for federal legislation, namely, that planning for local action can occur better through local response than through federal directives.

This philosophy encourages local initiative in determining community needs and in planning to meet them. The legislation clearly prescribed that the program be carried out on a regional rather than a national basis. The law represents a vote of confidence in the ability of the regional participants to accomplish the legislative intent through local initiative. The flexibility of the bill's provision further emphasizes the transference of responsibility to the regional level. A clearly defined national medical program would have been easier to implement but would have offered less opportunity for creativity, less likelihood of innovative approaches to unique local problems, and less local initiative.



Donal R. Sparkman, M.D.

It stresses cooperative planning among physicians and others, to make the best use of available regional health resources. It presents an opportunity for physicians to evaluate the existing system of continuing education and health care and to plan needed modification. The Regional Medical Program legislation prohibits both interference with the physician-patient relationship and the alteration of administrative hospital practices.

Recognizing the potential of the legislation while it was before Congress in 1965, John Hogness, Dean of the University of Washington School of Medicine, conferred with: officers of the medical Associations of Washington and Alaska, the governors of Washington and Alaska, congressional representatives, and leaders in voluntary health agencies. The bill as it emerged from the Congress met with their general approval and shortly thereafter Washington's Governor Evans concurred in a recommendation that the University of Washington serve as the applicant for a planning grant. The Governor of Alaska, the President of the Alaska Medical Association and the Alaskan Commissioner of Health and Welfare, among others, were in agreement with the proposal that Alaska join Washington in forming a region for planning under the heart, cancer and stroke bill.

A Regional Advisory Committee was appointed from candidates nominated by a broad representation of interested health organizations in the two states, and lay citizens appointed by the two governors. This advisory group, which supervises the activities of the RMP in Washington and Alaska, has met approximately every six weeks since its appointment in May, 1966, and has exerted a strong, guiding hand in the development of the program.

A three-year planning grant of $266,000 per year was approved September, 1966, for the Washington/Alaska Regional Medical Program (WARMP).

The goal of the WARMP is prevention of premature death or disability from heart disease, cancer, stroke and related diseases. This goal is to be accomplished by:

Dr. Sparkman is Director of W/A Regional Medical Program.

1. Improvement in continuing education opportunities for physicians and allied personnel.
2. Stimulation of cooperative activities among health professionals.
3. Encouraging the production of health manpower.

A step toward the accomplishment of these goals has been initiated in the collection and evaluation of data on health resources and needs. Sub-committees in heart, cancer and stroke, respectively, have met regularly to consider the data needed and have been impressed by inadequacy. Information on mortality rates is available but data are lacking on morbidity, disability and current levels of health care.

WARMP works toward its goals by funding pilot projects and specific activities directed by members of the health profession.

A survey of medical needs in Central Washington is an example of community activities stimulated bv the existence of the Regional Medical Program. Physicians of the Yakima County Medical Society formed a committee early in 1966 to consider their health care resources and needs. The committee included physicians from communities surrounding Yakima, representatives from allied health professions, hospital administrators and board members of hospitals, in their deliberations. This group identified needs for continuing education in health care. Result was submission of an application for a pilot project aimed at improving communications with teaching hospitals in the Seattle area to provide expanded, continuing education opportunities. A benefit already realized from this project is the beginning of fruitful discussions, among all providers of health care in this sub-region, toward the better understanding of needs and how they might be met by cooperative effort.

Our search for methods by which data might be collected, analyzed, stored, and retrieved, has confirmed a common observation that medical and hospital practices in general have not kept up with technological advances. For example, computers and systems to use them are available to aid others than just the business office of the hospital. They are now beginning to be used, for example, in performing, reporting and interpreting laboratory tests. Physicians might also benefit from the use of computers to collect, store, retrieve and display data. For example: the pooling of information from cancer registries in a manner that would make it quickly available to the inquiring physician. Sharing of such computer equipment could provide common data of considerable value to each hospital and community, and while such computer systems may be too expensive for small, or moderate size hospitals, they could be within the means of a group of hospitals. Hospitals are being asked, with increasing frequency, for time-consuming surveys of a great variety of data, of which could be provided easily and quickly if basic information were programmed into a computer. A multi-hospital cooperative venture in time-share computers is one of the studies currently being explored by WARMP among thirteen hospitals in northwestern Washington.

The RMP poses a serious challenge to the medical school. The faculty, already committed to teaching larger classes of undergraduates, expanding research programs, time-consuming administrative duties, as well as the manning of innumerable committees of National Institutes of Health and voluntary health agencies, is now asked to assume a considerable responsibility in augmenting the continuing medical education program and planning for community health care. Considering the existing commitments and purported ivory-tower philosophy of the traditional medical school, it is gratifying to find much genuine interest in this new venture and willingness to plan and serve.

Obviously, the augmented program of continuing education under the Regional Medical Program could not be manned by medical school faculty alone and it is fortunate that there are many leaders and teachers among practicing professionals whose talents have been previously untapped. Experience, to date, indicates that many of these professionals are willing and eager to participate in experiments with new and different methods of providing learning experiences.

In the important area of continuing education, the Washington State Medical Association and the Regional Medical Program plan a joint survey of physicians' practices, needs, activities, and desires. This study should produce data on which to base better ongoing plans for continuing education. In the meantime, plans are being made for pilot projects in continuing education, using new approaches to supplement those already offered by the Continuing Education Division of the University of Washington School of Medicine, directed by John N. Lein, and by other existing programs. Television, radio, telephone, and cartridge-loading, audiovisual instruments are included among the media to be tried. Preceptorships of one to several weeks will be offered in the larger hospitals as training experiences, and extended visits from specialists from urban centers to small hospitals will provide consultation and teaching services. Two communities in the region have already appraised their needs in continuing education and have submitted specific request for continuing education programs through

Continued on page 1127

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continued from page 1125

the RMP. A determined effort to evaluate the effectiveness of these programs will be made in order that we may proceed in the most proficient manner in the future.

The present state boundaries defining the Washington/Alaska Regional Medical Program are tentative. Since the regional concept transcends state boundaries in defining ideal health care service areas, greater definition of actual usage patterns determined through patient-origin studies, patient-referral patterns, hospital staff lists and related data, may considerably alter the area served by the present WARMP.

Coordinators of RMP's in all western states have met twice and it is clear that such inter-regional meetings and other communication between regions will be of value in sharing information about activities. Though local initiative and creativity are encouraged under Public Law 89-239, in order to produce original and unique activities in each region, there is obvious advantage in sharing experiences and plans to avoid unnecessary duplication and foster the adoption of outstanding programs.

While our present grant is for planning only, it is now our privilege to apply to National Institutes of Health for grants for operational activities, that is, for carrying out pilot programs in continuing education and improved methods of diagnosis, treatment and rehabilitation. When the availability of such grants became known in our region, a number of applications were proposed. General criteria for eligibility for such grants were that the projects would:

1. Add significant knowledge applicable to the improvement of levels of care for heart disease, cancer, stroke and related diseases in our region.
2. Offer creative and innovative approaches for continuing education and in the organization and delivery of health care, including facilitation of new diagnostic and therapeutic methods.
3. Have regional relevance.
4. Build on existing strengths and be directed toward demonstrable needs.
5. Lead to better utilization of existing health manpower and facilities and the development of training opportunities where needed.
6. Foster cooperative relationships among health professions, their organizations and institutions.
7. Have clarity of objective and results that could be attained and measured.

Those proposals which appeared to be eligible were screened by appropriate subcommittees and then reviewed by our Regional Advisory Committee (RAC). Projects approved by the RAC in early June were submitted to the Division of Regional Medical Programs (DRMP) where they were considered by a review committee and now await approval of the National Advisory Council of the DRMP. The larger part of our application relates to continuing education and communication; the balance may be classified as studies of patient care.

Data gathering is under way for assessing resources and needs in health care particularly as these relate to heart, cancer and stroke, and related diseases. Recognizing the need for wider community knowledge and involvement, the RMP is in the process of gathering and generating information relevant to its programs. Of special interest to the physician is the RMP Newsletter which will appear in this journal from time to time.

The acceptance and future expansion of the use of local initiative in defining and meeting health care needs through voluntary participation by concerned professionals will be dependent on your cooperation. Physicians are urged to suggest projects to deal with needs as they perceive them. Applications for operational grants, that will permit carrying out pilot projects in the areas where the need has been clearly demonstrated, may be submitted at any time.

If we as physicians cannot meet the challenges and exploit the opportunities for improving local health care, then diagnosis of needs and prescriptions for action will be generated elsewhere. The ultimate success of this program depends on how effectively medical institutions, organizations and individuals of this region use their initiative, resourcefulness, and creativity in putting together a cooperative effort that builds upon the best the region has to offer. The definition of our program will be devised by and dependent on the people and the institutions involved at the local community level. ■

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Regional Advisory Committee

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Henry I. Akivama, Internist-Cardiologist, Chairman, Southeastern Alaska WARMP group, 1420 Glacier Avenue, Juneau, Alaska 99801

Mr. John Bigelow, Executive Director, Washington State Hospital Association, 601 Broadway, Seattle, Washington 98122

Amos P. Bratrude, General Practice; Chairman, Continuing Education Committee, Washington Academy of General Practice; Box F, Omak, Washington 98841

H. P. Dygert, Member Board of Trustees, Washington State Medical Association, Vice President WSMA Education and Research Foundation; Hudson's Bay Medical Group, 2102 East McLoughlin Blvd., Vancouver, Washington 98661

continued on page 1128

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Annual Meeting, Oct. 1-4, 1968, Portland

J. Richard Raines, M.D.
OMA President-Elect

Glenn M. Gordon, M.D.
OMA President

E. G. Chuinard, M.D.
1967
"Doctor Citizen of the Year"

Glenn M. Gordon Installed 94th President of OMA

Glenn M. Gordon, a Eugene surgeon, was installed as 94th President of the 2250 member Oregon Medical Association during the 93rd Annual Meeting at Memorial Coliseum in Portland.

Dr. Gordon who was born and educated in Texas, graduated from the University of Texas School of Medicine in 1947. He spent his internship and residency in thoracic surgery at the U. S. Public Health Service Hospital in Staten Island, New York. In 1955, he began his practice in Eugene.

Dr. Gordon who is active in affairs of his professional organizations and community, belongs to the Eugene Surgical Society, the American College of Surgeons, American Board of Surgery and the American Board of Thoracic Surgery. He is also a past president of Lane County Medical Society and has served on the Board of Trustees since 1965. He serves on the Board of Directors of Goodwill Industries and Lane County Tuberculosis Association. He is also past president of the Parent Teachers Association of Madison School in Eugene. He was speaker of the OMA House of Delegates in 1963-1964.

Dr. Gordon, a "Flying Physician", maintains a private license and instrument rating.

The Gordons are the parents of seven children.

Officers Elected During Annual Session

J. Richard Raines, a Portland radiologist, was elected President-elect of the OMA during the Association's annual business meeting.

A 1935 graduate of the University of Oklahoma Medical School, Dr. Raines interned at Cleveland City Hospital and took his residency at Cleveland TB Hospital and Cleveland Clinic.

Dr. Raines is a past president of Pacific Northwest Radiological Society and Oregon Radiological Society. He is a past councilor of American College of Radiology and the Radiological Society of North America. He is a member of the American Roentgen Ray Society, FACR, and the Society of Nuclear Medicine.

Dr. Raines is active in Multnomah County Medical Society and served as its 80th president. He is a member of the Board of Censors, the OPS Supervisory Committee and the Foundation for Medical Care Committee.

Dr. Raines who is interested in community affairs, is a member of Portland Chamber of Commerce and Downtown Rotary, Multnomah Athletic Club, Knife & Fork Club, and the Reserve Officers Association.

Also elected were Huldrick Kammer to OMA Vice-president, and Noel Rawls to Secretary-treasurer.

Clinton McGill was elected as third delegate to the American Medical Association with Augustus Tanaka, and John Tysell chosen as alternate delegates to the AMA. Ernest T. Livingstone was re-elected as delegate to the AMA.

E. G. Chuinard Named 'Doctor-Citizen' of 1967

E. G. Chuinard, Chief Surgeon at Shriner's Hospital for Crippled Children in Portland, was presented with 'Doctor-Citizen-of-the-Year' Award at the OMA's Annual Awards Ceremony. Dr. Chuinard received the award for his countless contributions and service to community, state, and medical profession.

A dedicated historian and writer, Dr. Chuinard was personally responsible for the recent physician solicitation campaign to establish the "McLoughlin Room" in the Oregon Historical Society's new building. By his campaign efforts he helped the physicians to exceed their fundraising quota and surpass all other groups in raising money for the Oregon Historical Building.

Dr. Chuinard is Chairman of the Oregon Medical Association's Committee on Medical History, and heads a statewide centennial celebration of Medical Education, "Men and Milestones in Medicine", which hosts numerous exhibits, lecturers and displays. He is currently writing a book on the Lewis and Clark Expedition.

Dr. Chuinard is a Scottish Rite Mason, a member of Downtown Kiwanis, Portland Chamber of Commerce, Oregon Historical Society, and Herbert Hoover Foundation. He is a past president of the Rehabilitation Institute of Oregon, and serves on the board of directors of the University of Puget Sound. He is a past president of Oregon Medical Association and the Multnomah County Medical Society. He served as an Oregon delegate to the AMA in 1957-1961.

Since 1938, Dr. Chuinard has served on the volunteer faculty of the University of Oregon Medical School where he is now Clinical Professor of Orthopedic Surgery.

Both Dr. and Mrs. Chuinard are active in politics. Dr. Chuinard is a member of the Oregon Medical Political Action Committee and the American Political Action Committee and Mrs. Chuinard is fourth term legislator in Oregon's House of Representatives.

The Chuinards are parents of two children. Their son, Robert Chuinard, an orthopedic surgeon in residency at the University of Oregon Medical School Hospital, accepted the award for his father who was attending the Montana State Medical Association Meeting as a guest speaker.

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Physicians

GLENN M. GORDON, M.D.

PRESIDENT'S page

Communication is Essential!

"I believe our Association must become the most important medical group we belong to . . . because it is the one organization that speaks for all physicians."

The other day, while attending a regional meeting of physicians representing the eleven Western States, the question was raised as to what interpretation the Public Health Service would give to the word *comprehensive* as it applies to Public Law 89-749, the Comprehensive Health Planning Act. Various individual ideas, fears, and suggested interpretations could have continued the discussion for hours without any meaningful conclusions ensuing. Fortunately, a high-ranking PHS physician was attending the meeting. He was brought promptly to our discussion group and gave us a specific, lucid statement of interpretation. We then proceeded to ventilate in a more informed way—at least we knew the meaning of the law.

This example illustrates the absolute necessity of having available correct information in order to arrive at the best decisions. If you agree that to improve communication is a worthwhile goal, I suggest three methods of achieving that goal as it relates to the Oregon Medical Association.

FIRST, become an *active* member of your local medical society. Every community in this state has some problem relating to medical services of which you are aware, and which you can be of great help in solving. Each local society should have many committees actively concerned in the many facets of health care. Officers, Trustees and Delegates should recognize the responsibility placed on them by their peers and extend themselves to lead and represent their constituents. It is my impression that the high regard in which the medical profession has been held in the past (and hopefully in the future) has been related to the self-imposed responsibility and dedication of its members. Let us not forget this. Be an *active* local member of your medical society.

SECOND, become more informed as to the changing patterns in the medical field at state and national levels. Granted, that none of us can fully comprehend the full impact of current health legislation passed by our Oregon Legislature, and the Congress, this is no excuse for not becoming as fully informed as we can. Here, again, I believe the Officers, Delegates, and Trustees representing their constituent membership have an especial responsibility to bring to them information from the Oregon Medical Association and the American Medical Association, and just as importantly, to carry to the state and national levels the views and desires of the membership. I can confirm to you that medical practice as we know it will be changing. I believe we can help decide its course if we *all* become informed, *communicate* our views to our elected representatives, and to the community in which we live and work.

THIRD, demand the best of your State Association! There is no reason that our Association cannot become what you think it should be. Thus, demanding suggests that you will be informed, interested, ready to provide alternative solutions, and prepared to do some work. This is communication at work. I believe our Association must become the most important medical group we belong to for, in truth, it is the *one* organization that speaks for all physicians, be they teachers, practitioners, specialists, generalists, or in the public or private sector of practice.

In this era of technological advances, when the communication media drown us with material, mostly trivial or unimportant, I would recommend that you devote energy to becoming informed, to elect responsible leaders, and be sure your message gets to the top. ■

Glenn M. Gordon MD

REPORT OF THE HOUSE OF DELEGATES

Oregon Medical Association

The House of Delegates of the Oregon Medical Association convened for its 93rd Annual Meeting at Portland's Memorial Coliseum on Tuesday, September 19, 1967. Highlights of the meetings were:

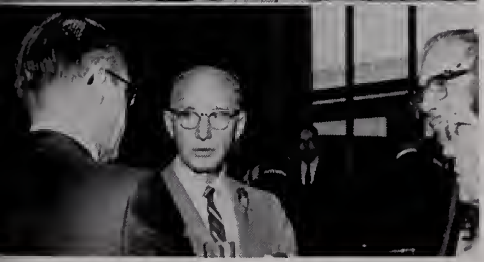
- *Adoption of a strong stand in favor of pollution control.*
- *Firm opposition to government controls requiring generic prescription of drugs.*
- *Endorsement of the profile system as a basis for the establishment of "usual and customary" fees for compensation of OPS member physicians.*
- *Encouragement of insurance companies and government-sponsored programs to provide comprehensive coverage for mental, behavioral and emotional disorders.*
- *Opposition to the establishment of programs that further the "medical ghetto" principle, and approval of the principle of single quality medical care.*

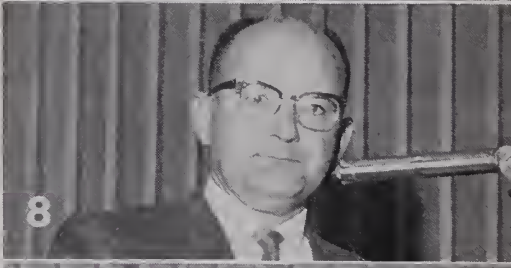
Sessions of the House were presided over by Speaker Clinton S. McGill of Portland and Vice-Speaker (President-Elect) Glenn M. Gordon of Eugene.

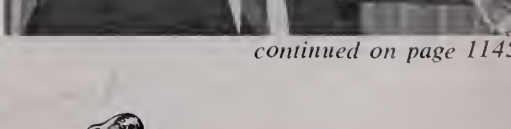
Business originating before the House was presented at the dinner meeting held Tuesday evening. In addition, delegates heard a special address by John E. Tysell, the Association's 93rd president and remarks by Edward Press, Oregon's new State Health Officer.

President's Address

Dr. Tysell referred to current proposals for far reaching and violent changes in the practice of medicine, reminding delegates that government spokesmen continue to emphasize the use of *closed panels of physicians*, *"monetary awards"* and *"utilization controls"*. He warned Oregon physicians to be alert and vigorous in their efforts to preserve the vital characteristics of American medicine.







(1) President Tysell addresses House members. (2) The assembly deliberates. (3) Of the 1450 registrants, 950 were physicians. (4) Doctor-delegates assemble before the House convenes. (5) Before addressing the House, Edward Press (center) pauses to discuss public health concerns with John Bussman, Leonard and Beatrice Rose. (6) Delegates register for opening session of the House's 93rd Annual Meet. (7) Reference Committee Chairmen: Louis Machlin, (8) George Schunk, and (9) George Zupan, present their reports to the House.

continued on page 114

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continued from page 1143

ANNUAL BUSINESS MEETING

A departure from the traditional annual banquet and inaugural ball was made at this session for the installation of the president and the presentation of awards. By vote of the Board of Trustees, the annual business meeting, the installation of the president and the presentation of awards were combined into one event and made a part of the scientific program. The ceremony began at 11:30 a.m. on Friday, September 22, in the Georgia-Pacific Room.

The business meeting was called to order by President John E. Tysell who presented the Reverend H. James Jenkins, Pastor of the First Methodist Church of Eugene, for the invocation. Dr. Tysell then asked all members and guests to stand for a moment of silence in the memory of members of the Association who had died during the year.

election of officers

Recommendations of the House of Delegates for officers of the Association to be elected by general membership were read. There being no further nominations from the floor, the recommendations were declared unanimously elected.

award ceremony

Project Vietnam Four Oregon physicians who during the past year volunteered for a year of service in AMA's Project Vietnam, were awarded special plaques. They are: E. Murray Burns, Roseburg; Thomas E. Morris, Jr., Portland; and John R. Boe, Grants Pass. Edward S. Morgan, Pendleton, the fourth Oregon physician who served in the project, was unable to attend.

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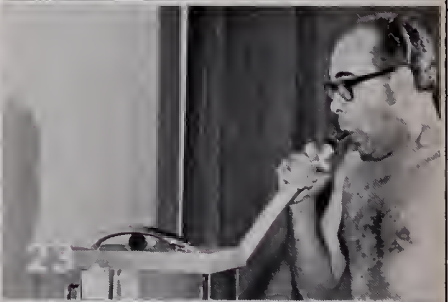
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(10) Reference Committee 'B' with: T. Hollis Hendricks, Ronald Findlay; J. Gordon Grout, Louis Machlan, Roy A. Payne, and Mr. Roscoe K. Miller, OMA Exec. Sec., hear disucssion on seven committee reports and nine resolutions. (11) During the Exhibitor Hour, representatives for the American Linen exhibition, Rita Hoffman and Judy Brown, are welcomed by T. Hollis Hendricks and Louis O. Machlan. (12) Exchanging ideas and suggestions with exhibitors is OMA Associate Exec. Sec., Bob Bissell (R.). (13) Exhibitors relax during the appreciation social hour held in their honor in the Fountain Room of Memorial Coliseum. (14) John Hayes discusses professional liability insurance, in Exhibit Hall, with Mr. Marion McCown and Mr. Ron Love of Pownall, Taylor & Hays. (15) The panel on Renal Dialysis during session.

(16) Physicians, guests of the Health Insurance Council, enjoy a Thursday evening social hour. (17) Four physicians who volunteered service in Project Viet Nam were honored at the Awards Ceremony. Receiving Plaques from John E. Tysell are: E. Murray Burns, Thomas E. Morris, and John R. Boe. Edward S. Morgan, the fourth physician, was unable to attend. (18) Glenn M. Gordon presents Mrs. John E. Tysell with a bouquet of Doctor's Wife roses. (19) Mr. Herb Johnston, Radio KXL, receives OMA's annual editorial award from John Tysell for his radio editorial on alcohol rehabilitation. (20) Receiving OMA's news reporting award of plaque and honorarium for their special work on renal dialysis reporting are Mr. Dan Steffey, reporter for Oregon City Enterprise, and Mr. Carl Vermilya accepting for Mr. Pat Wilkins, formerly of KATU-TV, who was unable to attend. (21) Receiving the Doctor-Citizen Award for his father, E. G. "Frenchy" Chuinard, is Robert G. Chuinard. (22) Miss Helen Platt, KGW-TV, receives a special award for meritorious and dedicated service as producer-director of "To Your Health". (23) During Physicians' Screening Examinations, F. Douglas Day measures his lung capacity by a Spirometer, and (23A) Benjamin B. Jones is given an ophthomological examination.

new state health officer

Edward Press made his inaugural appearance before an official body of the Oregon Medical Association when he addressed the House of Delegates briefly. A former medical assistant to the director of the Illinois Department of Public Health, Dr. Press fills the vacancy created by the resignation of Richard H. Wilcox in March of this year. He emphasized his desire to work closely with OMA and its committees in matters relating to public health in Oregon. He stated he was a member and served on committees of the Chicago Medical Society and the Illinois State Medical Society. Dr. Press is currently a member of the Council on Environmental and Public Health of the American Medical Association.

Report of Nominating Committee

The Nominating Committee, elected at the 1967 midyear meeting of the House of Delegates, was headed by John W. Bussman, Chairman and included: Louis O. Machlan, Jr., Clay A. Racely, Raymond M. Reichle, and James H. Seacat.

The Committee's report, presented by the Chairman, reads:

TO BE ELECTED BY THE
GENERAL ASSOCIATION

For President-Elect ..... J. Richard Raines, Portland
For Vice-President .. Huldrick Kammer, Portland
For Secretary-Treasure .. Noel B. Rawls, Astoria
For Speaker, House of Delegates
Clinton S. McGill, Portland

TO BE ELECTED BY THE
HOUSE OF DELEGATES

For delegate to AMA
Ernest T. Livingstone, Portland
(2-yr. term expiring in 1969)
For alternate delegate to AMA
Clinton S. McGill, Portland
(2-yr. term expiring in 1969)
For member, Committee on Publications
R. Wayne Espersen, Roseburg
(3-yr. term expiring in 1970)

A supplemental report of the nominating Committee stated that Oregon was eligible for a third delegate to AMA as of January 1, 1968, The Committee submitted names of the following three members for consideration by the House for this position: Daniel K. Billmeyer, Oregon City; Clinton S. McGill, Portland; and John E. Tysell, Eugene.

Both reports of the Nominating Committee were accepted.

McGill elected third delegate

The House voted to elect the third delegate to AMA prior to election of other officers by the House. On the second ballot Dr. McGill received a majority of delegates' votes. He will serve for a two-year term beginning January 1, 1968 and expiring December 31, 1969.

The following motions were then adopted by the House of Delegates:

1. That Ernest T. Linvingstone be elected delegate to the AMA for a two-year term beginning January 1, 1968 and expiring on December 31, 1969.
2. That R. Wayne Esperson be elected to the committee on Publications for a three-year term ending at the Association's annual meeting in 1970 and his name be submitted to the Board of Trustees of Northwest Medical Publishing Company as the Association's nominee for membership on that Board.
3. That John E. Tysell be elected alternate delegate to AMA for the unexpired term ending December 31, 1967 and for the two-year term beginning January 1, 1968 and expiring December 31, 1969.

The House of Delegates also approved recommendations of the Nominating Committee concerning officers to be elected by the general Association at its 1967 business meeting. The Committee was, however, directed to reconvene and prepare recommendations for the third alternate delegate to AMA.

At the closing session of the House of Delegates, 7:00 a.m. on Friday, September 22, the Nominating Committee submitted the name of Augustus M. Tanaka of Ontario for the position of alternate delegate to the AMA for a two-year term beginning January 1, 1968 and expiring on December 31, 1969. Dr. Tanaka was unanimously elected.

special recognition

House Speaker, Dr. McGill, proceeded to assign reports and resolutions to the three Reference Committees for consideration and recommendations. Resolution No. 2, however, submitted by the Council on Medical Education, and proposing special recognition of Dean David W. E. Baird of the University of Oregon Medical School, was unanimously adopted by acclamation. The resolution cited the advancements at the Medical School under Dr. Baird's deanship and proposed that the House of Delegates authorize the presentation to him of an appropriate plaque or certificate conveying the deep appreciation of Oregon physicians for his 25 years of dedicated service.

Press Awards Because of equal excellence of their articles, the news reporting award was shared by Mr. Daniel Steffey, reporter for the *Oregon City Enterprise-Courier* and Mr. Patrick Wilkins, formerly of Portland, who was news director of KATU-TV. Mr. Steffey and Mr. Wilkins were presented plaques, and shared the $100 acknowledgement.

A plaque and $100 acknowledgement was also presented to the editorial award winner, Mr. Herbert Johnson of Radio Station KXL for his special program on "Alcohol Rehabilitation".

A special press award for continued excellence and meritorius services was presented to Miss Helen Platt of KGW-TV for her direction of the program, co-sponsored by the Oregon Medical Association, "To Your Health".

outstanding manuscript

This year, for the first time, NORTHWEST MEDICINE presented an award to the Pacific Northwest resident submitting the most outstanding manuscript. The winner of this year's contest is R. Donald Woodson, Fellow-Cardiac Surgery, University of Oregon Medical School, who received a cash award of $200, a bronze plaque and a 24 volume set of Encyclopedia Brittanica. The presentation was made by Arthur J. Seaman, Professior of Medicine at the University of Oergon Medical School and Chairman of the Editorial Advisory Board of NORTHWEST MEDICINE.

Doctor-Citizen of the Year

Dr.Tysell announced that E. G. Chuinard of Portland, nominee of the Multnomah County Medical Society, was selected "Doctor-Citizen of the Year" for 1967. As Dr. Chuinard was attending the annual meeting of the Montana Medical Association as a guest speaker, the award was received by his son, Robert Chuinard of Portland.

Dr. Chuinard, an orthopedic surgeon, has contributed innumerable hours of volunteer work to Shriner's Hospital for Crippled Children in Portland.

As Chairman of the Association's Committee on Oregon Medical History he has spearheaded statewide observance of the centennial of medical education in Oregon. Past president of both Oregon Medical Association (1955-56) and Multnomah County Medical Society (1952), Dr. Chuinard served as an Oregon delegate to the American Medical Association (1951-61).

installation of Glenn M. Gordon

Following the Awards Ceremony, Speaker of the House, Clinton S. McGill, administered the oath of office to the Association's new president, Glenn M. Gordon of Eugene. After accepting the official gavel, Dr. Gordon presented Dr. Tysell with the traditional plaque, and a portrait painted in oil by the noted Northwest artist, John Sherrill Houser.

Immediately following adjournment of the business meeting, a reception was held honoring Glenn M. Gordon and the award winners.

final session of the house

The final session of the House of Delegates was held at 7:00 a.m., Friday September 22.

In addition to considering the reports of reference committees, the House heard brief remarks from Mrs. William V. Zartman, immediate past president of the Woman's Auxiliary, who presented Mrs. William L. Lehman recently installed Auxiliary President. Newly elected President-elect, Mrs. Russell Baker, was unable to attend.

Brief remarks were heard from Mrs. James Levy, regional Vice-President of the Student American Medical Association for District 7, that includes nine medical schools, and Mr. David A. Sack, President of the University of Oregon Medical School Chapter of the Student American Medical Association. Mr. Levy is a junior and Mr. Sack, a senior at the University of Oregon Medical School.

REPORTS OF REFERENCE COMMITTEES

All reports and resolutions before the House of Delegates were assigned to the three reference committees.

Reference Committee 'A' included: George J. Schunk, Salem, Chairman; Roland M. Mayer, Medford; A. M. Tanaka, Ontario; George A. Nash, Portland; and George M. Robins. This committee received all reports and resolutions relating to medical service in addition to several miscellaneous reports and resolutions.

Reference Committee 'B' included Louis O. Machlan, Jr., Portland, Chairman; Ronald Findlay, Eugene; J. Gordon Grout, Portland; T. Hollis Hendricks, The Dalles; Roy A. Payne, Milwaukie. In general, this Reference Committee received reports and resolutions relating to legislation and medical ethics.

Reference Committee 'C' included: George Zupan, Klamath Falls, Chairman; James C. Davies, Bend; Herbert E. Griswold, Jr., Portland; William D. Holst, Roseburg; and Edward E. Wayson, Portland. This Committee received all reports and resolutions relating to medical education, hospital service, and a number of miscellaneous resolutions.

Reference Committee 'A'

Following is the action of the House of Delegates on reports and recommendations considered by Reference Committee 'A':

I. The report of the Secretary-Treasurer was adopted.

II. The report of the Committee on Professional Consultation reviewed the malpractice situation in Oregon during the past year and recommended *"that a vigorous educational program on causes and prevention of medical malpractice cases in Oregon be initiated promptly and that the Committee on Professional Consultation be authorized to work with the Oregon Automobile Insurance Company and General Agents, Pownall, Taylor and Hays, in developing necessary programs, including (1) informative bulletins to members; (2) presentations before component and specialty societies; (3) hospital medical staff programs."*

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If it doesn't work in a week, forget it.

Contraindications: Edema; danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile or when other potent drugs are given concurrently. Large doses of Butazolidin alka are contraindicated in glaucoma.

Warning: If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Instances of severe bleeding have occurred. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy. Use with great caution in the first trimester of pregnancy.

Precautions: Before prescribing, carefully select patients, avoiding those responsive to routine measures as well as contraindicated patients. Obtain a detailed history and a complete physical and laboratory examination, including a blood count. The patient should not exceed recommended dosage, should be closely supervised and should be warned to discontinue the drug and report immediately if fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools or other evidence of intestinal hemorrhage occur. Make regular blood counts. Discontinue the drug immediately and institute countermeasures if the white count changes significantly, granulocytes decrease, or immature forms appear. Use greater care in the elderly and in hypertensives.

Adverse Reactions: The most common are nausea, edema and drug rash. Swelling of the ankles or face may be minimized by withholding dietary salt, reduction in dosage or use of diuretics. In elderly patients and in those with hypertension the drug should be discontinued with the appearance of edema. The drug has been associated with peptic ulcer and may reactivate a latent peptic ulcer. The patient should be instructed to take doses immediately before or after meals or with milk to minimize gastric upset. Mild drug rashes frequently subside with reduction of dosage. However, rash accompanied by fever or other systemic reactions usually requires withholding medication. Purpuric rash has also been reported. Agranulocytosis, ex-

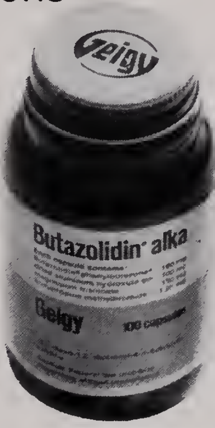
In rheumatoid arthritis, Butazolidin alka needs only a week's trial. If it doesn't work in a week, forget it.

A short trial period may spare patients weeks of discomfort. That's one reason why Butazolidin alka seems a good choice when aspirin fails.

It's not for every patient. Check carefully the Contraindications, Warning, and Precautions shown below.

And adverse reactions may occur. The most common are nausea, edema and rash. Rarely, agranulocytosis has been reported. All adverse reactions are listed below, too.

You'll know quickly if it works.
And most of the time, it will.



foliative dermatitis, Stevens-Johnson syndrome, or a generalized allergic reaction similar to serum sickness may occur and require permanent withdrawal of medication. Stomatitis, salivary gland enlargement, vomiting, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported. While not definitely attributable to the drug, a causal relationship cannot be excluded. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss have been reported, as have hyperglycemia, hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently. Moderate lowering of the red cell count due to hemodilution may occur.

Dosage in Rheumatoid Arthritis: Initial: 3 to 6 capsules or tablets daily in 3 or 4 equal doses. Trial period: 1 week. Maintenance dosage should not exceed 4 capsules or tablets daily; response is often achieved with 1 or 2 capsules or tablets daily.
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The report and recommendation of the Committee on Professional Consultation were adopted.

III. The report of the Committee on Publications, summarizing the current status of NORTHWEST MEDICINE, was adopted.

IV. The report of the Committee on Cancer reviewed its work as Advisory Committee to the Oregon Division of the American Cancer Society, emphasizing the Society's activities in sponsoring establishment and continuation of tumor clinics and registries, professional education cancer conferences, research grants made to Oregon instiutions; including the University of Oregon Medical School. The report recommended the Oregon Medical Association continue its close relationship with the Cancer Society and that the Association's Committee on Cancer *meet, at least, annually as a Committee of the Association and in liaison with members of the Oregon Medical Association."* The report and recommendations of the Committee on Cancer were adopted.

V. The report of the Committee on Federal Medical Services recommended that *"the billing form for Military Medicare and for the Military Retirees and Dependents Civilian Medical Care Programs be revised and updated.*

The Committee's report was adopted.

VI. A resolution was introduced by the Multnomah County Medical Society recommending *"that the Oregon Medical Association include voluntary dues billings for membership in the American Medical Association's Woman's Auxiliary on the regular OMA annual physicians' dues statements, effective for the year 1968."*

The resolution was referred to the Advisory Committee to the Woman's Auxiliary for further study and recommendations.

VII. The report of the Committee on Professional Welfare recommended:

(1) That the offer of Transpacific Life Insurance Company (carrier for the Association's disability insurance program) to improve the benefits under the plan to include protection for physicians who fly their own airplanes provided such insured physicians have, at least, 200 hours of approved flying credit be accepted.

(2) That the offer of Standard Insurance Company (carrier for the Association's group term life insurance plan) to conduct a special open enrollment at reduced premium rates, be accepted.

(3) That the Committee be authorized to encourage members of the Association to apply for participation in the physicians' retirement plan of AMA or to establish for themselves some other form of retirement program which also takes advantage of the new provision of the Keogh Act.

(4) That Committee be authorized to proceed with the development of pamphlets containing guidelines for physicians in organizing their affairs, and for the families of physicians in the event of the physician's death.

The reference Committee recommended that Recommendation No. 3 be amended by adding the following supplemental statements: *(a.) Physicians are urged to use caution in choosing a plan. (b.) It is urged that component societies develop informational programs for their new members.*

With these two amendments, the report of the Committee on Professional Welfare was adopted.

VIII. The Report of the Committee on Charitable Medical Care reviewed the Committee's discussion with the State Public Welfare Committee, since the midyear meeting of the House of Delegates, and recommended:

(1) That the plan adopted by the House of Delegates at its 1967 midyear meeting relative to billings for welfare services, at the "usual and customary" level, be continued.

(2) That the officers of the Association seek to obtain authorization from individual physicians for the release by Oregon Physicians' Service and other physician-sponsored prepayment plans in Oregon and by Aetna Life Insurance Company, under Medicare of their fee schedules and "usual and customary" fee data to the State Public Welfare Commission for statistical services for public welfare recipients.

(3) That the Association seek to obtain such information from areas of the State which are not included in the above coverage.

(4) That a communication be sent to all physicians of the State requesting they continue to bill the State Public Welfare Commission in accordance with their "usual and customary" fee charges and that Mr. Andrew F. Juras, Administrator of the State Public Welfare Commission, be invited to join the Oregon Medical Association in this request.

The report of the Committee on Charitable cal Care was adopted.

IX. The report of the Special Committee on Oregon Physicians' Service, containing the following recommendations, was adopted:

(1) That it is desirable to establish the profile system as a method for compensating OPS member physicians on the basis of "usual and customary" fees.

(2) That to maintain this method, the broadest possible guidelines should be established with the understanding that a participating agreement would exist between the physician and Oregon Physicians' Service.

(3) That a mechanism for the adjustment of the individual fees of a physician should be in-

cluded in such guidelines.

(4) That the local review committee should be designated as supervisor of the program in each specific county or area.

(5) That the authority for adjustment of fees should be delegated to the local review committee subject to Bylaws of OPS.

(6) That any disagreements or misunderstandings which arise between OPS and any participating physicians shall be transmitted to the local review committee for decision and recommendation.

X. Two resolutions, one introduced by the Lane County Medical Society and the other by Wayne Pidgeon, President of the Mental Health Association of Oregon, recommended inclusion of coverage for mental health by health insurance plans.

The Reference Committee, considering the two resolutions together, recommended the following substitute resolution:

> *"That the Oregon Medical Association encourage all insurance companies and government-sponsored programs to prepare and offer for sale plans which will pay for a substantial portion of the total medical expense of mental, behavioral, and emotional disorders; and that these payments be made on the same basis as other illness."*

The substitute resolution was adopted.

XI. A resolution introduced by the Marion-Polk County Medical Society, urging the retention of the pre-audit and profile system as the preferred method of applying the "usual and customary" fee principle to Oregon Physicians' Service contracts, was adopted.

Reference Committee 'B'

Following is the action of the House of Delegates on the reports and recommendations considered by Reference Committee 'B'.

I. The report of the Oregon State Board of Medical Examiners was adopted. The House of Delegates also highly commended the Board for its success in modernizing the Oregon Medical Practice Act during the 1967 Legislative Session.

II. The report of the Committeee on National Policy reviewed work of the Oregon delegation to AMA during the past year and also summarized the status of current legislation relating to medicine and public health, now pending before the 90th Congress. It recommended that delegates and officers of the Association be authorized to take whatever steps are necessary to obtain the designation of Portland as the site for the 1974 AMA Clinical Meeting. It also recommended *"that members of the House of Delegates write and strongly urge the members of their respective component societies to write to Senator Wayne Morse and to Senator Mark Hatfield in opposition to S. 2299 now pending before the U.S. Senate and which relates to the compulsory generic prescribing of drugs."*

The report of the Committee on National Policy was adopted.

III. The report of the Special Committee on Title XIX reviewed the work of that Committee in informing the general membership of the Association and the members of the 1967 State Legislature regarding provisions of this Title of Public Law 89-97 and the work of the Special Committee in obtaining the enactment of a Title XIX law in Oregon.

The House of Delegates adopted the Committee's report and commended the members for their efforts on behalf of Title XIX. The Committee was also requested to continue its work and give special emphasis to continuing physician education on Title XIX.

IV. Although the report of the Committee on Military Affairs did not contain any recommendations, the House of Delegates adopted the report and commended the Committee and its Chairman, Noel B. Rawls of Astoria, for their work in fostering an equitable administration of the Doctor-Draft Law in Oregon.

V. The report of the Committee on Public Policy summarized the legislative proposals relating to medicine and public health which were before the 1967 Oregon Legislative Assembly. The House of Delegates adopted the report and highly commended the Committee on Public Policy and particularly the five-member "Priorities Committee" which was established to take immediate and emergency action.

VI. The report of the Committee on Public Relations contained the following recommendations:

(1) That the Association sponsor an orientation session for the newly licensed physician, at the time the physician is in the city meeting with the State Board of Medical Examiners, and that each component society establish a physician-to-physician relationship for new physicians as a means of orienting them into the practice of medicine in their particular medical community.

(2) That the annual OMA press awards include specifically, three instead of two division awards, one news feature reporting award for print media; one news feature reporting award for broadcast media, and the regular editorial award for all media, and that these awards continue to be recognized by a plaque and an honorarium of $100 each.

(3) And that reaffirmation for the continuance of the following projects be granted:

a. *Press Awards*
b. *Oregon's Code of Cooperation for Physicians, Hospitals, Television, Radio, and Press*
c. *Local News Clinics*
d. *Doctor-Citizen of the Year*
e. *To Your Health*
f. *Speakers' Resource List*
g. *General Dissemination of Health Information*

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The report of the Committee on Public Relations was adopted.

VII. The report of the Oregon Medical Political Action Committee reviewed the Committee's progress during the past year. The report noted that this has been a record year for OMPAC, the committee is second in the nation in percentage of members and dollar contributions per physician.

The House of Delegates adopted the Committee's report and highly commended the Committee for its work. Members of the House of Delegates were also reminded that on numerous occasions the House has adopted resolutions endorsing OMPAC and urging each of its members to affiliate.

VIII. A resolution introduced by Lane County Medical Society recommended that delegates of OMA present the AMA House of Delegates with a motion urging AMA's Bylaws *"be changed so that one-third of the membership of the AMA House of Delegates must be under forty years of age."*

The House of Delegates referred this resolution to the Study Committee on Grass Roots Representation for early consideration.

IX. Two resolutions relative to air pollution, one by the Lane County Medical Society and the other by the delegation from Benton County, were introduced. The following substitute resolution was adopted:

air pollution

THEREFORE BE IT RESOLVED that the Oregon Medical Association immediately and publicly take issue against the continued and uncontrolled pollution of the environment in this State and inform the public of the severe health dangers which may result therefrom; and

BE IT FURTHER RESOLVED that OMA create a special committee to be appointed by the Board of Trustees to study the health aspects of environmental pollution; to accumulate data and disseminate it to members of the Association and the general public; and be available as consultants to interested agencies and organizations; and,

BE IT FURTHER RESOLVED that the OMA and the Special Committee sponsor state legislation to establish necessary authority and funding for protection of the health of Oregon citizens from effects of environmental pollution.

X. A resolution, submitted by Baker County Medical Society recommended the Association *"cease to assist the Federal Government in its implementation of Medicare and work ener-*

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(24) Robert Stanton undergoes an EKG during Physician Screening Examination. (25) Receiving th Aesculapius certificate, plaque and check for mos outstanding scientific exhibit, a display on "Hypo tonic Duodenography", are: Marcia K. Bilbao, Loui H. Frische, Charles T. Dotter, and Josef Rosch. (26 A century of medical education is dramatized in 6x13 ft. mural by John Sherrill Houser. House (seated) reviews "Men and Milestones in Medicine with William R. French and T. Hollis Hendricks (27) Roaring-Twenty Flappers: Mrs. Jack Battalia Mrs. Roy Payne, and Mrs. Betty Ferrell, pin OMPA roses to lapels of AMPAC Chairman Blair J. Hen ningsgaard; OMA President Glenn M. Gordon, an Speaker of the House Clinton S. McGill. (28) Joh E. Tysell is presented with a portrait painted b John Sherrill Houser. (29) Congratulations are of fered at the President's Reception receiving line t newly elected OMA Officers and award winner (30) Toasting "Past, Present and Future" are (L-R. OMA Past-President John E. Tysell; President Glen M. Gordon, and President-elect J. Richard Raine (31) George Satterwhite receives a message at Pa cific Northwest Bell's Physicans' Message Cente (32) Governors Tom McCall, Oregon, and Dan Evan Washington, discuss Oregon's political action com mittee with OMPAC Chairman Merle Penningto and AMPAC Chairman Blair Henningskaard listen ing. (33) OMPAC's booth featured Flappers, an banjo music played by physician's families.

(34) Congressman Wendall Wyatt chats with Mr Howard C. Emmerson and Mrs. William V. Zartma

getically for its repeal." Because no member of Baker County Medical Society appeared before the Reference Committee to testify on the resolution; it was not considered.

XI. A resolution — introduced by Multnomah County Medical Society on behalf of Remy Fulsher of Portland related to the establishment of fixed fees by health insurance carriers. Considering this resolution and an additional resolution introduced by Multnomah County Medical Society relating to federal intervention in the free choice of physicians, the Reference Committe recommended adoption of the following substitute resolution:

free choice of physician

THEREFORE BE IT RESOLVED, that OMA strongly disapproves of the interpretation by the U.S. Civil Service Commission of P.L. 86-382, the Federal Employees Health Benefit Act, which would force certain private insurance companies to sign up a large number of "participating" physicians in order to keep government insurance contracts; and, does not approve contracts which restrict free choice of the physician by the public; and,

BE IT FURTHER RESOLVED, that such an interpretation by the Civil Service Commission tends to erode "free choice of physician" concept, which is essential to optimal medical care; and,

BE IT STILL FURTHER RESOLVED, that OMA notify members of Oregon's Congressional delegation and the U.S. Civil Service Commission of this resolution; and

BE IT STILL FURTHER RESOLVED, the Oregon delegates to the AMA introduce a similar resolution protesting the interpretation by the Civil Service Commission of Public Law 86-382.

The House of Delegates adopted the substitute resolution of the Reference Committee.

XII. The House of Delegates adopted the following resolution, introduced by the Priorities Committee on Public Policy:

hazard to health care

THEREFORE BE IT RESOLVED, that the Oregon Medical Association affirm the position of the AMA House of Delegates at the 1966 Clinical Meeting which stated *"that Chiropractic is an unscientific cult"* and *"that chiropractic constitutes a hazard to rational health care"*; and,

BE IT FURTHER RESOLVED, that the Board of Trustees of the Oregon Medical Association undertake appropriate activities to alert the general public of hazards involved in such unscientific practice and encourage physicians participation in the medical profession's program to reduce such dangers to the health and welfare of the public; and,

BE IT STILL FURTHER RESOLVED, that effort be extended in opposition to the inclusion of chiropractic care under federal or state health care programs.

XIII. The following resolution, also introduced by the Priorities Committee of the Committee on Public Policy, was adopted.

quality medical care

THEREFORE BE IT RESOLVED, that OMA be opposed to establishment of programs furthering the "medical ghetto" principle; and,

BE IT FURTHER RESOLVED, that OMA will continue to work for establishment of a single standard of quality medical care, with help for needy and the degree of help based on actual need; and,

BE IT STILL FURTHER RESOLVED that OMA continue to work for State and local control of health programs and be opposed to contractual arrangements of Federal Government which bypass the fiscal control of the state; and,

BE IT STILL FURTHER RESOLVED, that the Association direct its delegation to introduce the intent of this resolution at the next meeting of the House of Delegates of the American Medical Association.

XIV. A resolution introduced by the Multnomah County Medical Society recommended that the Association declare *"its strong opposition to any legislative or administrative proposal which would compel physicians to prescribe, or pharmacists to dispense, drug products by generic name only."* It also recommended the Association advise the Oregon Congressional delegation of this position.

The resolution was adopted.

Reference Committee 'C'

The action of the House of Delegates on reports and resolutions considered by Reference Committee 'C' was as follows:

I. The following reports, containing no recommendations, were accepted as information:

(1) Report of the Committee on Conservation of Hearing
(2) Report of the Committee on Oregon Medical History
(3) Report of the Council on Medical Education
(4) Report of the Medical Advisory Group to the Oregon Regional Medical Program
(5) Report of the Advisory Committee to Regional Planning Program for Southern Oregon and Northern California.

II. No action was taken on the report of the Committee on Medical Television.

III. A resolution by the Council on Medical Education recommended that the popular attitude toward medical education be updated, with proper emphasis on the teaching sector of medical education. It recommended that AMA's Council on Medical Education be encouraged to *"take an early and active role"* in the attempt to update these attitudes.

The resolution was adopted.

IV. A resolution introduced by the Multnomah County Medical Society recommended the Association approve the use, by experienced

continued on page 1159

A breakthrough in the control of pain

Talwin®

brand of
pentazocine
(as lactate)

a potent injectable non-narcotic—
may be used in place of morphine
and other narcotic analgesics

A breakthrough in the control of pain

Talwin®

brand of **pentazocine** (as lactate)

a potent injectable non-narcotic—may be used in place of morphine and other narcotic analgesics

Talwin 30 mg. relieves pain usually as quickly and effectively as morphine 10 mg.*

whatever the intensity of the pain

whatever the cause of the pain

whatever the site† of the pain

whatever the chronicity of the pain

whatever the age†† of the patient

without the liability of narcotics

without the development of tolerance on prolonged use

with less risk of severe respiratory depression than with morphine

with less constipation

with less urinary retention

Clinical experience of more than 150 investigators with over 12,000 patients given varying dosages of Talwin shows that this potent injectable analgesic is not a narcotic.

Talwin has less risk of severe respiratory depression, urinary retention, and constipation than morphine—a great boon for postsurgical patients.

Talwin produces less nausea, vomiting and diaphoresis than meperidine.

Constipation and urinary retention are seldom a problem with Talwin.

Very rarely do hallucinations or disorientation occur (0.1% each).

No significant hepatic, renal, hematopoietic or neurologic disturbances have been reported.

Talwin is well tolerated even by the aged or very ill patients.

Used during active labor, its tolerance by the mother and newborn is comparable to meperidine's. As with all new drugs, Talwin should be used with caution in pregnant women and in women delivering premature infants.

Tolerance to the analgesic effect of Talwin has not developed with prolonged use.

Talwin gives significant relief of pain in from 15 to 20 minutes following I.M. or S.C. injection.

Talwin relieves pain usually for 3 hours or longer with a single injection; however, the duration may sometimes be less than with morphine.

86 per cent of medical and surgical patients obtained excellent to good relief with Talwin 30 mg. administered parenterally

*Its duration of action may sometimes be less than that of morphine.

†Should not be used for patients with increased intracranial pressure, head injury or pathologic brain conditions.

††Until sufficient experience is gained, Talwin should not be administered to children under 12 years of age.

Talwin
brand of pentazocine (as lactate)
used for pain of all types

Talwin has a wide range of usefulness in surgery

Types of surgical use	Number of patients	Efficacy				
		% Exc.	% Good	Exc. + Good	% Fair	% Poor
• Preoperative	118	31	52	83%	15	2
• Postoperative	914	58	28	86%	8	6
• Pre- and postoperative	12	75	17	92%	0	8
• Minor surgery	33	30	39	69%	0	31*
• Traumatic	14	64	29	93%	7	0
• Dental	33	67	24	91%	3	6

Total patients............1124

Efficacy of 30 mg. Talwin I.M. and S.C. as related to types of surgical use in a cooperative study

Data in files of Department of Medical Research, Winthrop Laboratories.

*High incidence of poor results in minor surgery is due primarily to one study involving change of burn dressings in children; 9 of 19 patients obtained poor results with dose used.

Talwin relieves all types of pain in acute and chronic medical disorders

Type of medical pain	Number of patients	Percentage of relief				
		Excellent	Good	Exc. + Good	Fair	Poor
• Malignancy, pain in	161	44	37	81%	8	11
• Orthopedic; see also "Arthritis"	111	53	38	91%	5	4
• Cardiovascular pain; see also "Miscellaneous medical"	96	59	27	86%	6	7
• Genitourinary pain	83	42	33	75%	16	10
• Arthritis	76	33	51	84%	12	4
• Gynecologic pain	35	57	34	91%	6	3
• Cephalalgia	21	45	41	86%	9	5
• Gastrointestinal pain	19	89	5	94%	0	5
• Chest, including • Pleurisy • Pulmonary embolism and infarct • Lung abscess	12	83	17	100%	0	0
• Miscellaneous medical, including • Peripheral vascular disease • Thrombophlebitis • Cervical root pain • Facial neuralgia • Syringomyelia • Burns	108	50	39	89%	9	2

Total patients............722

Efficacy of 30 mg. Talwin I.M. and S.C. as related to types of medical pain in a cooperative study

Data in files of Department of Medical Research, Winthrop Laboratories.

See next page for additional product information

Talwin relieves pain as quickly as morphine

A comparison of Talwin 30 mg. and morphine 10 mg. I.M. in controlling postoperative pain*

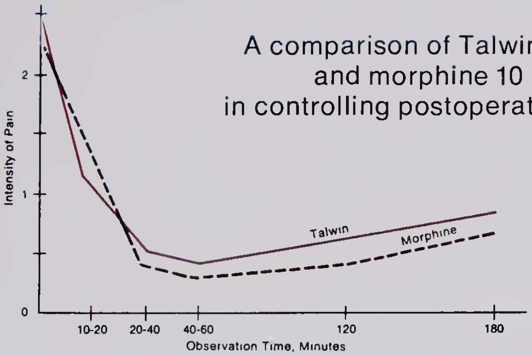


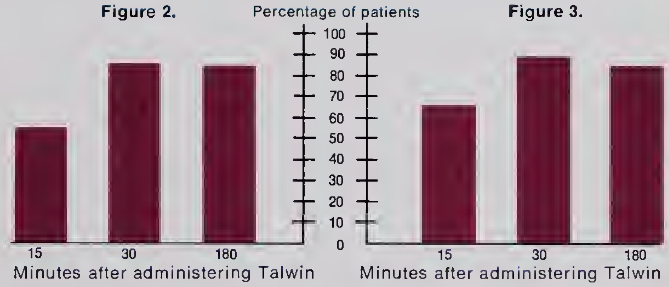
Figure 1.

Talwin 30 mg. proved equivalent to morphine 10 mg. in overall analgesic efficacy. During the early post-medication period (up to 40 minutes after drug injection), Talwin was superior in effect to morphine.

After observation periods ranging from 40 to 180 minutes there was no difference between the drugs in their effect on intensity. There were 141 and 119 complete patient records for Talwin and morphine, respectively, in this double-blind study. Other clinical investigators, studying duration, state that relief with Talwin may be obtained for up to three hours or longer, a period sometimes less than morphine's.

Talwin is as effective for severe pain (Fig. 2) as for moderate pain (Fig. 3)†

Figure 2. **Figure 3.**



Minutes after administering Talwin

Per cent excellent to good relief of severe pain obtained with 30 mg. Talwin in 218 postoperative patients

Minutes after administering Talwin

Per cent excellent to good relief of moderate pain obtained with 30 mg. Talwin in 203 postoperative patients

Talwin does not require a narcotics prescription or narcotics records

The World Health Organization Expert Committee on Dependence-Producing Drugs concluded that "...there was no need at this time for narcotics control of pentazocine [Talwin] internationally or nationally."‡

---

*Storer, E. H.: Data in the files of the Sterling-Winthrop Research Institute.

†Cooperative study, data in the files of the Department of Medical Research, Winthrop Laboratories.

‡*World Health Organization Technical Report Series*, No. 343, 1966, p. 6.

A breakthrough in the control of pain

Talwin®

brand of

pentazocine

(as lactate)

a potent injectable non-narcotic—may be used in place of morphine and other narcotic analgesics

Contraindications: *Increased Intracranial Pressure, Head Injury, or Pathologic Brain Conditions in which clouding of sensorium is undesirable.* Talwin (brand of pentazocine) should not be administered in these cases, since drug-induced sedation, dizziness, nausea, or respiratory depression could be misleading.

Precautions: *Pregnancy.* No teratogenic or embryotoxic effects attributable to the use of Talwin have been seen in extensive reproductive studies in animals; however, like all new drugs, Talwin should be given with caution to pregnant women. A large number of patients in labor have received the drug with no adverse reactions other than those that occur with commonly used strong analgesics. However, as with other strong analgesics, Talwin should be used with caution in women delivering premature infants.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Certain Respiratory Conditions. The possibility that Talwin (brand of pentazocine) may cause respiratory depression should be considered in treatment of patients with bronchial asthma. Talwin should be administered only with caution and in low dosage to patients with respiratory depression (e.g., from other medication, uremia, or severe infection), obstructive respiratory conditions, or cyanosis.

Patients Dependent on Narcotics. Because Talwin is a narcotic-antagonist, patients dependent on narcotics and receiving Talwin may occasionally experience certain withdrawal symptoms. Talwin should be given with special caution to such patients. It has been observed that some patients previously given narcotic-analgesics for one month or longer had mild withdrawal symptoms when the drug was replaced with the analgesic, Talwin. After a short period of adjustment the subjects were usually able and willing to continue taking Talwin, and relief of pain was satisfactory.

Nonaddicted Patients Receiving Narcotics. Symptoms believed to be indicative of antagonism to the opiate may be observed rarely with administration of Talwin to patients receiving opiates for a short time. Intolerance or untoward reactions are seldom observed after administration of Talwin to patients who have received single doses or who have had limited exposure to narcotics.

Impaired Renal or Hepatic Function. Although laboratory tests have not indicated that Talwin (brand of pentazocine) causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment. Extensive liver disease appears to predispose to greater side effects (e.g., marked apprehension, anxiety, dizziness, sleepiness) from the usual clinical dose, and may be the result of decreased metabolism of the drug by the liver.

Myocardial Infarction. As with all drugs, Talwin (brand of pentazocine) should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract.

Adverse Effects: Talwin is relatively free from the undesirable side effects associated with morphine, such as constipation, urinary retention, or severe respiratory depression. Furthermore, Talwin produces less nausea, vomiting, and diaphoresis than meperidine.

In over 12,000 patients who received Talwin intramuscularly, subcutaneously, or intravenously, nausea, the most frequent adverse effect, occurred in approximately 5.0 per cent. In decreasing order of occurrence were vertigo, dizziness or lightheadedness; vomiting; and euphoria. Respiratory depression was reported as an adverse reaction in 1.0 per cent.

The incidence of each of the other adverse effects was well below 1.0 per cent: constipation, circulatory depression, diaphoresis, urinary retention, alteration in mood (nervousness, apprehension, depression, floating feeling), hypertension, sting on injection, headache, dry mouth, flushed skin including plethora, altered uterine contractions during labor, dermatitis including pruritus, dreams, paresthesia, and dyspnea occurred rarely after administration of Talwin (brand of pentazocine). Furthermore, each of the following adverse reactions occurred in less than 0.1 per cent: tachycardia, visual disturbance (blurred vision, diplopia and nystagmus), hallucinations, disorientation, weakness or faintness, muscle tremor, chills, allergic reactions including edema of the face, taste alteration, insomnia, diarrhea, cramps, and miosis; laryngospasm in one patient.

Talwin has not produced severe respiratory embarrassment in adults (never apnea), even with large amounts. A small number of newborn infants whose mothers received Talwin during labor had transient apnea. The incidence of temporary diminution in the rate or strength of uterine contractions is low after administration of Talwin, similar to that following meperidine hydrochloride. (In reporting no interference with normal labor in patients receiving Talwin, one investigator further stated that the drug may increase uterine activity.) Generally, no significant fetal heart rate change occurs.

Laboratory tests of blood and of liver and kidney functions have revealed no significant abnormalities. A minimum and probably insignificant increase in the per cent of eosinophils in peripheral blood counts and bone marrow occurred occasionally.

Talwin is well tolerated by patients with diabetes mellitus, and no changes in insulin requirements have been observed.

Dosage and Administration: *Adults, Excluding Patients in Labor.* Average recommended single parenteral dose is 30 mg., by intramuscular, subcutaneous, or intravenous route; may be repeated every three to four hours. Pain has been relieved in most patients with not more than three doses daily. Infrequently, selected patients have received single doses as high as 60 mg.

Patients in Labor. A single, intramuscular 30 mg. dose has been most commonly administered. An intravenous 20 mg. dose has given adequate pain relief to some patients in labor when contractions become regular, and this dose may be given two or three times at two- to three-hour intervals, as needed.

Children Under 12 Years of Age. Since clinical experience in children under twelve years of age is limited, the use of Talwin (brand of pentazocine) in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who received Talwin for prolonged periods (e.g., over 300 days) experienced no withdrawal symptoms even when administration was stopped abruptly; furthermore, there was no tolerance to the analgesic effect.

CAUTION. Talwin should not be mixed in the same syringe with soluble barbiturates because precipitation will occur.

Treatment of Overdosage or Respiratory Depression. Talwin has not produced apnea or severe respiratory embarrassment in adults, even in large doses. Occasionally, however, moderate respiratory depression may occur. Means of maintaining proper oxygenation should be available in case of overdosage or respiratory depression, and methylphenidate (Ritalin®) should be administered parenterally. The usual narcotic-antagonists, such as nalorphine, are not effective respiratory stimulants for depression due to Talwin.

How Supplied: Ampuls of 1 ml., containing Talwin® (pentazocine) as lactate equivalent to 30 mg. base and 2.8 mg. sodium chloride, in Water for Injection. **Boxes of 10, 25, and 100.**

Multiple dose vials of 10 ml., each 1 ml. containing Talwin® (pentazocine) as lactate equivalent to 30 mg. base, 2 mg. acetone sodium bisulfite, 1.5 mg. sodium chloride, and 1 mg. methylparaben as preservative, in Water for Injection. **Boxes of 1.**

The pH of Talwin solutions is adjusted between 4 and 5 with lactic acid and sodium hydroxide.

Winthrop

Winthrop Laboratories, New York, N.Y. 10016

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registered nurses, of monitoring, pacemaking, defibrillatory and resuscitative equipment if a licensed physician is not immediately available to do so. The resolution stipulated that the nurses' authority to employ such lifesaving corrective measures would be contingent upon adequate training in these techniques, prior authorization by the attending physician and the hospital's medical, nursing and administrative staffs. It also stipulated that when ever such a cardiac emergency exists a physician should be summoned to assist the nurses.

The House of Delegates adopted this resolution.

V. A resolution introduced by Multnomah County Medical Society, recommended establishment of a coronary care unit liaison committee to make possible *"discussion and evaluation of the needs of the various community hospitals."* It was recommended the Committee *"work in close cooperation with the Oregon Heart Association, the Oregon Regional Medical Program of the Heart, Cancer and Stroke, and other health agencies".*

The House of Delegates adopted the resolution.

VI. An additional resolution introduced by the Multnomah County Medical Society recommended that the Association or its Council on Medical Education establish an educational coronary care program with the purpose of establishing, implementing and coordinating "programs for the training of nurses and the education of physicians in the specific techniques required for:

continued on page 1161

(35) Speaker of the House, Clinton S. McGill swears in Glenn M. Gordon as 94th President of OMA. (36) OMPAC Eye-Ball Award went to C. H. "Larry" Hagmeier, for his "eye ball to eye ball" effort in increasing OMPAC membership. (37) "Governors in the Northwest are really big men", exclaims Merle Pennington, OMPAC Chairman. (38) Mrs. Roy Payne, Mrs. Frank White, and Mrs. William Zartman prepare for the champagne bus trip to Salem to dedicate Med-Aux Park II. (39) Secretary of State Clay Myers acknowledged the worthwhile project of building playgrounds for handicapped children. (40) The President's pin is given to Mrs. William L. Lehman, newly installed Auxiliary President, by Mrs. William Zartman. (41) President Gloria Zartman kept the Auxiliary business meeting at a lively pace. (42) Mrs. Dan Halferty and Mrs. John Tysell chat with OMA's incoming president Glenn M. Gordon, and Bernice Sachs, guest luncheon speaker. (43) Coffee and conversation at Shangri-La reception. (44) Physicians' wives pause for refreshments during Shangri-La reception. (44A) Physicians' wives enjoyed the Auxiliary Luncheon. (45) "Tale of Turtle" is told during dedication ceremonies of Med-Aux Park II.

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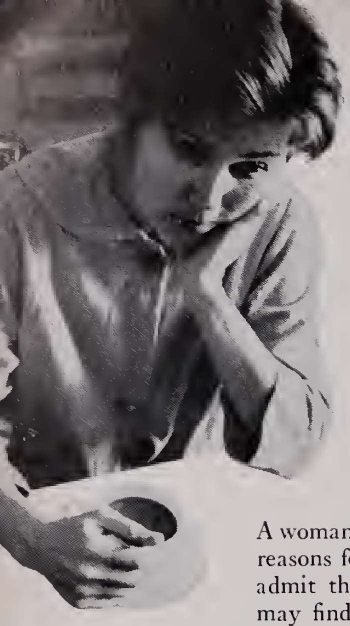


Tears without grief

Crying Spells–psychic tension with depressive symptoms?
"I don't know what's the matter with me lately...I cry and I cry... and I really don't know why I do."

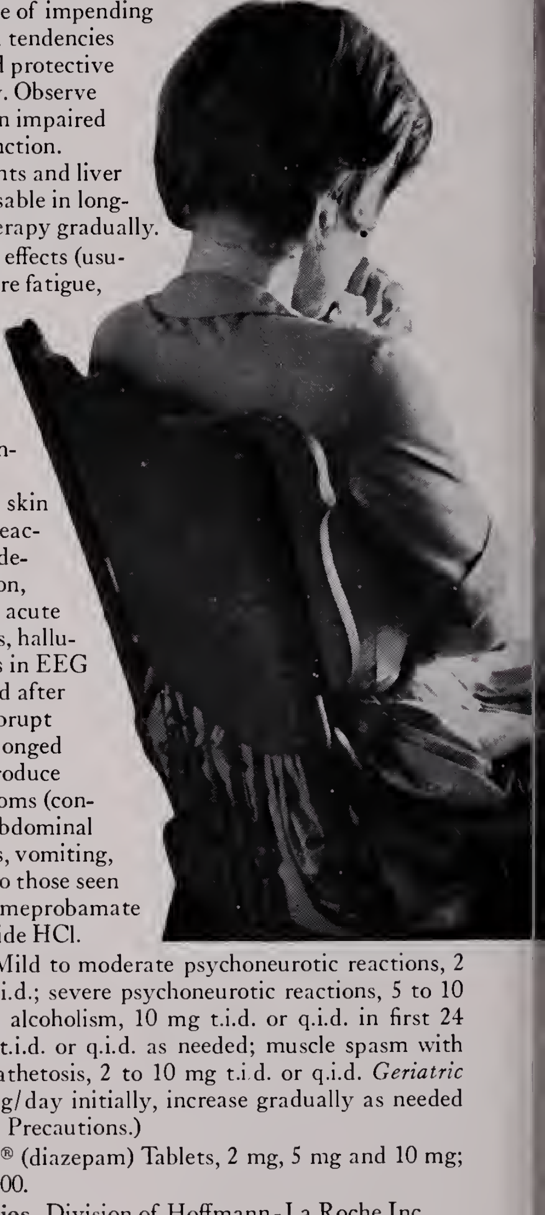
A woman often is not conscious of the real reasons for her crying spells or refuses to admit them to herself. On probing, you may find that frequent weeping, like insomnia or neurotic fatigue, often is an expression of psychic tension. She needs sympathy and reassurance, and perhaps a calming agent to help her over her crisis. Consider prescribing Valium (diazepam) for her. It usually reestablishes calmness promptly. Crying spells and other secondary depressive symptoms normally subside as the tension is relieved. Your patient then can cope more easily with stresses to which she is subjected. Valium (diazepam) is generally well tolerated, and on proper mainteenance dosage usually does not impair mental acuity or ability to function. If side effects such as ataxia and drowsiness occur, they usually disappear with dosage adjustment.

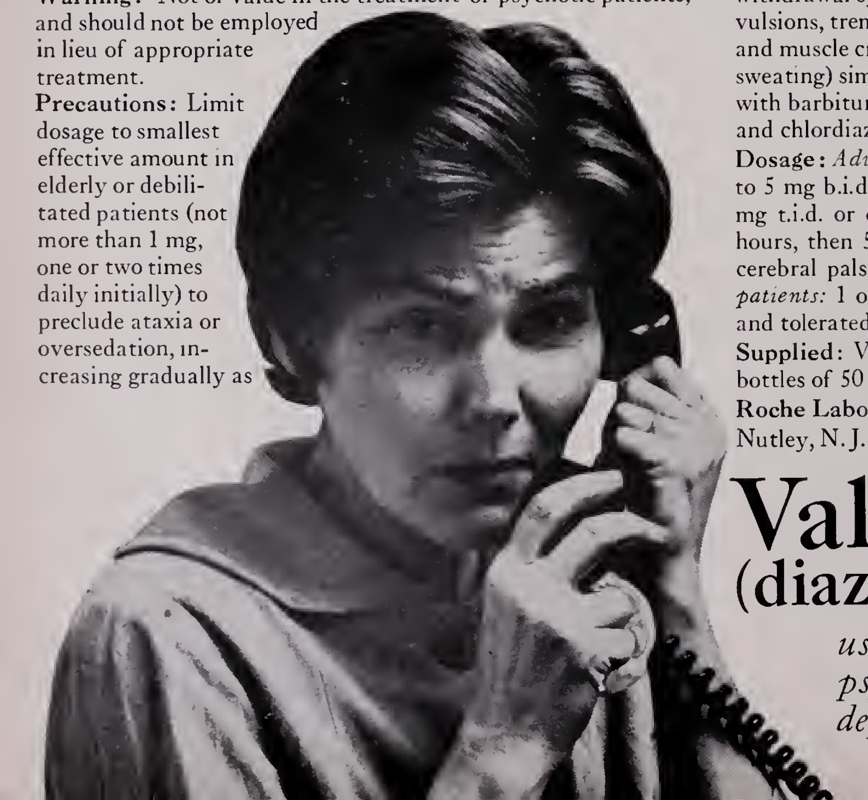
Before prescribing, please consult complete product information, a summary of which follows:

Contraindications: Infants, patients with history of convulsive disorders, glaucoma or known hypersensitivity to drug. **Warning:** Not of value in the treatment of psychotic patients, and should not be employed in lieu of appropriate treatment.

Precautions: Limit dosage to smallest effective amount in elderly or debilitated patients (not more than 1 mg, one or two times daily initially) to preclude ataxia or oversedation, increasing gradually as needed or tolerated. As is true of all CNS-acting drugs, until correct maintenance dosage is established, advise patients against possibly hazardous procedures requiring complete mental alertness or physical coordination. Driving during therapy not recommended. In general, concurrent use with other psychotropic agents is not recommended. If such combination therapy is used, carefully consider individual pharmacologic effects—particularly with known compounds which may potentiate action of Valium (diazepam), such as phenothiazines, barbiturates, MAO inhibitors and other antidepressants. Advise patients against simultaneous ingestion of alcohol or other CNS depressants. Safe use in pregnancy not established. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Observe usual precautions in impaired renal or hepatic function. Periodic blood counts and liver function tests advisable in long-term use. Cease therapy gradually.

Side Effects: Side effects (usually dose-related) are fatigue, drowsiness and ataxia. Also reported: mild nausea, dizziness, blurred vision, diplopia, headache, incontinence, slurred speech, tremor and skin rash; paradoxical reactions (excitement, depression, stimulation, sleep disturbances, acute hyperexcited states, hallucinations); changes in EEG patterns during and after drug treatment. Abrupt cessation after prolonged overdosage may produce withdrawal symptoms (convulsions, tremor, abdominal and muscle cramps, vomiting, sweating) similar to those seen with barbiturates, meprobamate and chlordiazepoxide HCl.





Dosage: *Adults:* Mild to moderate psychoneurotic reactions, 2 to 5 mg b.i.d. or t.i.d.; severe psychoneurotic reactions, 5 to 10 mg t.i.d. or q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; muscle spasm with cerebral palsy or athetosis, 2 to 10 mg t.i.d. or q.i.d. *Geriatric patients:* 1 or 2 mg/day initially, increase gradually as needed and tolerated. (See Precautions.)

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 50 and 500.

Roche Laboratories, Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

ROCHE

Valium®
(diazepam) Roche®

useful for the relief of psychic tension with associated depressive symptoms

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(46) Mr. Fred Edmunds, horticulturist, and special guest of the Auxiliary luncheon, admires a Doctor's Wife Rose. **(47)** Unable to resist the Fall Session special of three Doctor's Wife Rose bushes for $10 are Frank White and Huldrick Kammer purchasing roses from Miss Chris Kammer. **(48)** Co-chairmen of the Seventh Annual Med-Art Exhibit, Mrs. Lawrence Heiselt and Mrs. Clyde H. DuVall, Jr., present program exhibits to Auxiliary President Mrs. William V. Zartman. **(49)** Secretary of State Clay Myers officiates at dedication ceremonies of Med-Aux Park II, held at Shangri-La School. Assisting are Mrs. Lyle Murphy, Legislative Chairman of Woman's Auxiliary to the American Medical Association, and Mrs. John M. Ross, County Chairman of Med-Aux Park. **(50)** Physicians' wives admire handiwork of Shangri-La School students. **(51)** Auxiliary members admire a wood sculpture by Otto E. Kraushaar.

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(1) Organization and administration of coronary care programs.
(2) Recognition and treatment of life-threatening cardiac arrhythmias;
(3) Early recognition and prompt or aggresive management of congestive heart failure and/or shock complicating myocardial infarction;
(4) Use of monitoring, pacing and defibrillating equipment; and
(5) Special techniques such as intracardiac pacing."

The House of Delegates adopted the Resolution.

VII. A resolution introduced by John E. Tysell, emphasized increasing casualties resulting from inhalation of toxic substances. The resolution stated that the developing situation *"threatens to create a medical problem of epidemic proportions."*

The resolution concluded:

THEREFORE BE IT RESOLVED, that the House of Delegates directs the Board of Trustees to immediately appoint an Ad Hoc Committee on drug abuse to sponsor a statewide educational program in cooperation with component societies and educational authorities to the end *"that every citizen be informed of the seriousness of the problem and the risks and hazards of these substances."*

The House of Delegates voted to refer the resolution to the Committee on Pharmacy and Drugs and the Committee on Public Relations.

diet control medications

President Tysell requested authorization to introduce a resolution relating to unsupervised use of diet control medications. The House of Delegates unanimously consented to introduction of the resolution which concerned the investigation by Russell Henry, Oregon's Chief Medical Investigator into the deaths allegedly resulting from the unsupervised use of so-called "diet pills". The resolution was as follows:

THEREFORE BE IT RESOLVED that Dr. Henry be highly commended for his thorough and painstaking investigation of circumstances related to deaths of which the use of so-called "diet pills" are suspected cause; and,

BE IT FURTHER RESOLVED, that the Oregon news media be given meritorius recognition for its accurate and complete reporting of these circumstances, in the public interest; and,

BE IT FURTHER RESOLVED, that the Oregon Medical Association issue a warning to all citizens of Oregon against the use of diet or weight control medications except upon the advice and under the continuous supervision of their family physician.

Following a period of discussion, the resolution was voted to be referred to the Committee on Pharmacy and Drugs.

report on resolutions

The Committee on Credentials was asked by the Speaker of the House to act as a Committee on Commendatory Resolutions. This Committee included John A. Hull, Corvallis, Chairman; Joseph L. Miller, Portland; and A. J. Kerbel, Astoria. Acting in this capacity, as a Committee on Resolutions, the Committee recommended that this House of Delegates express its appreciation to the following:

1. John E. Tysell, President, 1966-67.
2. Glenn M. Gordon, President-Elect, 1966-67.
3. Max H. Parrott, Trustee of the AMA.

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continued on page 1161

4. Blair J. Hennigsgaard, Ernest T. Livingstone, James H. Seacat, and Daniel K. Billmeyer, delegates and alternate delegates to the AMA.
5. The Woman's Auxiliary and its president and president-elect, Mrs. William V. Zartman and Mrs. William L. Lehman.
6. The members of the Board of Trustees and Committees of the Association.
7. Mr. John J. Coughlin, Legal Council, and Mr. John P. Misko, Legislative Representative.
8. The Sommer Memorial Lecture Foundation and the members of its Advisory Committee.
9. The members of the Association who participated in the Scientific Program of this Annual Session both by presentation of papers and scientific exhibits.
10. The members of the Association and their families who entered works of art in the 1967 Physicians Art Exhibit and especially the members of the Woman's Auxiliary who installed the exhibit.
11. The Technical Exhibitors.
12. The Memorial Coliseum and its staff including Valley Decorators.

OBITUARIES

13. The news media of Portland and Oregon for *veteran of World Wars 1 and 11. He was retired at the* their excellent coverage of events of this annual session.
14. The Association headquarters office staff.

There being no further business, the final session of the House of Delegates was adjourned.

DR. COLLIE F. CATHEY, *81, Scotts Mills, died September 25. He was born at Canyonville, Oregon, and graduated from the University of Oregon Medical School, Portland, in 1911. He was licensed in 1913. Cause of death was uremia due to cancer of bladder.*

DR. GEORGE W. MILLETT, *78, Portland, died September 13. He was born in Nebraska and graduated from the California College of Medicine, Los Angeles, in 1917. He was licensed in 1921. Dr. Millett was a veteran of World Wars 1 and 11. He was retired at the time of his death. Cause of death was carcinoma of the colon.*

DR. WILLARD N. THOMPSON, *62, of Salem died September 17. He was born in Mauston, Wisconsin and graduated from Loma Linda University School of Medicine, Los Angeles, in 1933. He was licensed in 1936. Cause of death was ventricular fibrillation due to arteriosclerotic heart disease.*

DR. JOHN A. SAARI, *76, of Portland died September 2. He was born in Ishpening, Michigan and graduated from Rush Medical College, Chicago, in 1916. He was licensed in 1922. Dr. Saari was a veteran of World War 1. Cause of death was cerebral arteriosclerosis and cirrhosis of liver.*

Diarrhea
TROCINATE® 400 MG.
BRAND THIPHENAMIL HCl.

The relief received from the first Trocinate 400 mg. tablet is so prompt that the discomfort of diarrhea ceases to be a bother. May be repeated every four hours.

Upon request, a supply of Trocinate 400 mg. with literature will be sent to physicians for their personal use.

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WASHINGTON

Washington State Medical Association—444 N.E. RAVENNA BLVD., Seattle, Washington 98115

PRESIDENT *Charles D. Muller, M.D., Bremerton*
SECRETARY *Carl E. Mudge, M.D., Seattle*
EXECUTIVE SECRETARY *Mr. R. F. Gorman, Seattle*
Annual Meeting, Sept. 22-25, 1968, Seattle

REPORT OF THE HOUSE OF DELEGATES

Washington State Medical Association

Seattle, 1967

Daily newspapers throughout the state gave better-than-average general coverage to the 78th Annual Convention of the Washington State Medical Association held in Seattle's Olympic Hotel, September 10-13. Physician and guest attendance approximated 2,000 persons. The General Scientific Session had its best attendance in years. The theme of the Session, "Patient Monitoring" was well accepted with the following hospitals providing tours of patient monitoring facilities: Children's Orthopedic, Doctors, Overlake Memorial, Providence, Swedish, University and Virginia Mason. Scientific and Technical Exhibits were well attended. Thirteen special guest scientific speakers provided the physician attendance with an excellent variety of scientific papers.

Reference Committees were well attended with particular concentration directed throughout the entire Session to problems created by the administration of Title 19 programs in the State of Washington and a host of other government activities in the health field. Delegates gave marked approval of the progress report presented by the Washington State Medical Education and Research Foundation of its activities for the past year along with a resume of its current and future objectives.

The actions of the House of Delegates at its final session on Wednesday, September 13, are briefly outlined in the following report.

new officers elected

The House voted the following physicians into office:

Elected WILLIAM E. WATTS, Seattle, President-Elect; JOHN R. HOGNESS, Seattle, AMA Delegate; CHARLES P. LARSON, Tacoma, Vice-President; and ROBERT F. L. POLLEY, Seattle, Assistant Secretary-Treasurer. Re-elected PETER T. BROOKS, Walla Walla, AMA Delegate; WILLIAM F. MEAD, Seattle, Finance Committee Chairman (to fill unexpired term of Wilbur E. Watson, Seattle—1968); and HEYES PETERSON, Vancouver, Speaker of House of Delegates. All become members of the WSMA Board of Trustees.

Newly-elected to Board of Trustees were: CLIFTON E. BENSON, Bremerton; WILLIAM BLACKSTONE, Longview; AMOS BRATRUDE, Omak, and THOMAS E. SHEEHY, Seattle.

Re-elected to Board of Trustees were: WARREN BERGHOLZ, Bellingham; ROBERT M. BOND, Walla Walla; DOUGLAS BUTTORFF, Tacoma; LOUIS S. DEWEY, Richland; H. PAUL DYGERT, Vancouver; WARREN J. KRAFT, Wenatchee; HERBERT C. LYNCH, Yakima; WILLIAM H. MYERS, Everett; HAROLD L. TRACY, Moses Lake, and J. WALFRED WALLEN, Burlington.

Holdover Trustees are: A. BRUCE BAKER, Spokane; DONALD T. HALL, Seattle, Chairman, Medical Defense Committee; LaRUE S. HIGHSMITH, Spokane; LUCIUS D. HILL, III, Seattle, Immediate Past-President; ROBERT B. HUNTER, Sedro Woolley, AMA Delegate; W. MAURICE LAWSON, Seattle; WALDO O. MILLS, Seattle, AMA Delegate; CARL E. MUDGE, Seattle, Secretary-Treasurer; CHARLES D. MULLER, Bremerton, WSMA President; and STANLEY W. TUELL, Tacoma.

important actions

In other actions, the House of Delegates:

A. *Accepted as amended* a Proposed Amendment to Article IV, Section 4, of the Constitution which qualifies non-citizen membership in a component Society. The Proposed Amendment will be published at least twice before the next Session of the House of Delegates in the official journal, NORTHWEST MEDICINE, and submitted to the 1968 House of Delegates for final vote.

B. *Adopted* a Proposed Amendment to Chapter VIII, Section 1, of the Bylaws which will change the status of the Committee on Medical Aspects of Sports from "Special" to that of a "Standing" Committee.

foundation

C. A special progress report on the first year's activities of the Washington State Medical Education & Research Foundation was received as information. Several areas of Foundation interest and activity for the coming year were projected and approved:

1. The desirability and feasibility of developing funded studies in several fields: (a) organization and evaluation of health services; (b) metropolitan health problems; (c) quality and standards of health care; and (d) continuing medical education.
2. Exploration of studies in the field of community health services.
3. Exploration of creating annual supporting, contributing and sustaining memberships in the Foundation by the general public.
4. Establishing memorial funds for specific purposes.

government programs

D. In an endeavor to keep the membership informed of the complexities of providing modern health care, the following reports relating to the medical profession's involvement with government were either presented to the Delegates or mailed prior to the House of Delegates Session: 1. Special Report on Regional Medical Programs; 2. Compendium of Government Programs and Legislation; and 3. The Corson Report.

The Report of the actions of the AMA Delegates, *filed* by the House of Delegates, carries numerous references and actions relating to present day health care under government programs.

A Special Report of the Executive Committee on "Government Programs and Related Principles and Policies" was *adopted with commendation as amended*. The following Recommendations of the Report, as amended, were adopted:

Recommendation 1: That the WSMA Board of Trustees meet when and where necessary for the purpose of conducting regular Board meetings and for briefing and informational sessions for all County Medical Society Officers and Staff and other members who would attend at the direction and expense of their local Societies. Among other things, the Board meetings and the briefing sessions would from time to time hear reports from state and federal health program administrators on the status of programs and future plans; from Legislators and Congressmen; from the medical school, and from leaders of those segments of the public that are supporting revolutionary changes for the delivery of health services.

Recommendation 2: That the WSMA Central Office issue a memo when necessary giving a brief report on principal current issues, important meetings of the immediate future, and that the memo be distributed to WSMA delegates and alternates, county medical society officers and staff, and such other active WSMA members as may find it appropriate and helpful.

Recommendation 3: That the Commmittee on Revision of Constitution and Bylaws study the Constitution and Bylaws and the WSMA committee structure and make recommendations to the House of Delegates in September 1968, in respect to adapting this structure to the responsibilities of medicine in the current environment; the consolidation of overlapping committee jurisdictions; the improvement of communications; and the improvement of the decision-making processes of the House of Delegates, the Board of Trustees and the County Medical Societies.

Recommendation 4: That the WSMA President, with the advice and consent of the WSMA Board of Trustees appoint an Ad Hoc Committee to study the role of medicine in society and make annual informational reports of its studies to the House of Delegates, and to the membership.

Recommendation 5: That Substitute Resolution No. 4 (Negotiation of Health Care Programs) and Resolution No. 8 (Statement of Principles) adopted by the 1966 House of Delegates be analyzed to determine whether they are in need of amendment or qualification in respect to Recommendation No. 6.

Recommendation 6: That the House provide policy guidelines for the WSMA County Medical Societies and the general membership with respect to such programs as the King City and San Francisco projects; the Children and Youth Project; the projects of a proposed Health Services Research Center at the University; the operational service-rendering projects of the Regional Medical Program; and similar experimental and demonstration efforts to be funded under Public Law 89-749 (Comprehensive Health Planning and Public Health Services).

In accomplishing Recommendation 6, the House again examined and *reaffirmed* the two Resolutions (Substitute Resolution No. 4 and Resolution No. 8) adopted in 1966 which, in effect, provide guidelines and principles to organize medicine in implementing government programs, and *adopted* the following recommendation to clarify interpretation of these guidelines and principles: *"That the House of Delegates declare that the Washington State Medical Association and its County Medical Societies may actively engage in projects which have as their purpose exploration, implementation, and evaluation in various methods and techniques for providing health care services, provided that such activities be considered as experimental and in no way indicative of abandonment of the aforestated principles."*

Recommendation 7: That the House of Delegates urges strong WSMA representation on Councils to be created under Public Law 89-749 (Comprehensive Health Planning) and urges each of the County Medical Societies to fully participate in Comprehensive Health Planning Councils as these are formed in the Counties following the organization of the State Health Planning Council.

Recommendation 8: That Medical Bureaus and Washington Physicians Service be urged to consider favorably:

A. Obtaining reputable professional studies of the costs, advantages, and disadvantages of medical care under Bureau methods;

B. Retaining business planning, research and development experts to design new forms of Bureau operations to meet current and future demands for comprehensive community health services; and

C. Allowing the Washington State Medical Association to make findings known to the general public, and its leadership groups, and to government.

annual structure review committee

E. *Adopted with commendation as amended,* a report to the Board of Trustees by the Annual Meeting Structure Review Committee. The recommendations adopted were based on the Committee's review of each function of the Annual Meeting in respect to importance to total membership, the effective utilization of time, financial involvement, and managerial aspects. Following is a brief resume of the Committee recommendations adopted by the House:

1. Several sections of the Constitution and Bylaws dealing with the Annual Meeting will be reviewed by the Committee on Constitution and Bylaws.

2. At the present time, facilities capable of accommodating the Annual Meeting are available only in Seattle and Spokane.

3. At the present time, there will be no change in policy regarding date and location of the Annual Meeting.

4. The policy will be retained of offering a diversified scientific program with the emphasis on quality that has resulted in improved scientific programs of recent years.

5. Changes in the format of the scientific program will be explored, such as: postgraduate courses for credit presented by the University of Washington; roundtable discussion groups; seminars devoted to limited subject matter for small numbers of participants to create an informed atmosphere and encourage more active participation.

6. A physician advisory committee to technical exhibitors will be appointed to seek ways of better communication and improved scientific material.

7. The first meeting of the House of Delegates will be held as usual on Sunday afternoon with reference committee meetings to begin on Monday morning and continue as necessary. This will allow more time in reference committees for discussion and evaluation.

8. The Salmon Derby will be discontinued due to lack of interest and participation. The Golf Tournament will continue as long as attendance remains substantial.

medical school teaching and research hospital

F. *Adopted* a recommendation of the Medical School, Teaching and Research Hospital Committee that the WSMA Board of Trustees and Executive Committee continue their liaison with the School of Medicine in reference to federal and state programs such as the Regional Medical Program.

mental health

G. *Adopted with commendation* the Report of the Committee on Mental Health wherein it recommended continued active WSMA support of the implementation of the Mental Health Services Act and the Mental Retardation Act for the development of community-oriented mental health programs, as well as active assistance to the Legislative Council in its study to amend the involuntary commitment procedures law.

prepaid medical care

H. *Adopted* the Annual Report of the Committee on Prepaid Medical Care wherein it re-affirmed the policy of the 1965 and 1966 House of Delegates sessions relative to negotiating health care programs which state: ". . . health care programs be negotiated and administered through physician-sponsored plans based upon existing practices in this state" and ". . . that the principle of usual and customary fees be firmly established in future negotiations with governmental agencies."

public laws

I. *Adopted with commendation* the Annual Report of Committee on Public Laws (with special commendation to Mr. Harlan R. Knudson, WSMA Legislative Representative), wherein AMPAC is congratulated for its contributions in improving the working relationship of medicine with members of the State Legislature and Congress, and county medical societies are encouraged to hold a meeting every two years honoring members of the State Legislature and key elected county officials.

school health

J. *Adopted with commendation* the Report of the School Health Committee and approved, in principle, the "Guidelines for School Health Policy" prepared by the Subcommittee on School Health Policy.

scientific work

K. *Filed* the Annual Report of the Committee on Scientific Work with special commendation to the Subcommittee on Scientific Program.

aging population

L. *Adopted as amended* the Report of the Aging Population Committee wherein it was recommended that the Committee ". . . formally offer its services in the capacity of a medical advisory committee to the Washington State Council on Aging"; and that various suggestions be made to the Council to help provide present day statistics on the aged.

communicable diseases

M. *Filed* the Annual Report of the Committee on Communicable Diseases wherein the Committee outlined its participation in the implementation of the statewide program to "End Measles Campaign" and its involvement to a minor extent with the State Department of Health, county medical societies, county health departments and community groups to plan for the "End Measles Days" in November, 1967.

maternal and child welfare

N. *Adopted as amended* the Report of the Committee on Maternal and Child Welfare wherein it recommends that the Committee investigate the feasibility of a study of infant and perinatal mortality rate in the state with comparison between urban, rural, economic and ethnic groups.

medical aspects of sports

O. *Adopted* a Proposed Amendment to the Constitution and Bylaws which establishes this committee as a "Standing" Committee; and *adopted* the Annual Report of the Committee on Medical Aspects of Sports wherein it is recommended that a policy statement be sent to the Washington Interscholastic Activities Association establishing that: "one annual physical examination for students engaged in competitive athletics would suffice for all competitive sports unless there has been intervening illness or injury."

neoplastic

P. *Filed* the Report of the Committee on Neoplastic Disease along with the recommendation that the Committee not be reappointed as its work is being carried on by the Cancer Coordinating Committee, an interagency group founded by the WSMA. The Committee will be put on a standby basis subject to referrals from the Executive Committee or Board of Trustees.

rehabilitation programs

Q. *Adopted* the Annual Report of the Committee on Rehabilitation Programs wherein it recommended that local county medical societies form standing rehabilitation committees as a means of delineating local rehabilitation needs and providing information on the available resources for meeting these needs. Speakers and rehabilitation presentations are available to county societies through this Committee.

revision of constitution and bylaws

R. *Adopted* the Annual Report of the Committee on Constitution and Bylaws with the recommendation that: *"The Committee on Revision of Constitution and Bylaws study the Constitution and Bylaws and the WSMA committee structure and make recommendations to the House of Delegates in September 1968, in respect to adapting this structure to the responsibilities of medicine in the current environment; the consolidation of overlapping committee jurisdictions; the improvement of communications and the improvement of the decision-making processes of the House of Delegates, the Board of Trustees and the county medical societies."*

state department of public assistance (advisory)

S. *Adopted with commendation as amended* the Annual Report of the State Department of Public Assistance (Advisory) Committee wherein problems relating to the administration of Title XIX by the State Department of Public Assistance were outlined, and recommended that the following statement be added to the Committee Report: *The Washington State Medical Association believes that the present operating procedures and restrictions prescribed by the State Department of Public Assistance limit the quality of medical care which physicians can provide for public assistance beneficiaries. The WSMA requests that the Department review its administrative practices in order that these patients may receive the highest quality of medical care, this being the intent of Title XIX of the Federal Medicare Law.*"

vehicle safety

T. *Adopted with commendation* the Annual Report of the Committee on Vehicle Safety wherein recommendations were made that the WSMA: 1) lead, or assist in, an initiative campaign to establish legislation to reduce presumptive limits and establish the principle of implied consent (to be put on the ballot in the Fall of 1968)—the project to be undertaken by the Woman's Auxiliary to the WSMA; 2) disapprove, officially, the language of House Bill #532 calling for a physician's "unqualified statement," and that a bill to delete the offensive portion of the measure be supported in the next Session of the Legislature.

resolutions

U. Two Resolutions were *adopted as amended:*

1. *Dispensing and Sale of Cigarettes*—resolving that the WSMA take a strong stand against the dispensing and sale of cigarettes on the premise of hospitals and medical facilities, and to encourage all its members to urge the hospitals and medical facilities in which they practice to stop dispensing and the sale of cigarettes as a reasonable public health measure.

2. *Implied Consent* — resolving: A. WSMA endorsement of the concept of implied consent legislation; B. WSMA endorsement of the enactment of legislation to the effect that a blood alcohol level of 0.10 (100 mg) percent or higher be considered evidence of intoxication incompatible with safe driving; and C. WSMA Board of Trustees direct the Woman's Auxiliary to organize and lead an initiative campaign to establish legislation lowering presumptive limits and establishing the implied consent principle as it applies to testing blood alcohol if the procedure seems to be at all feasible. ■

Shadel Hospital

12001 Ambaum Boulevard, S.W.
Seattle, Washington 98146
CH 4-8100

The new 52-bed Shadel Hospital, designed specifically for the treatment of alcoholism, combines the quiet surroundings and peaceful atmosphere of a secluded district. The design is both modern and functional and will maintain the personal and homelike atmosphere which has been synonymous with Shadel Hospital treatment.

MEMBER OF THE AMERICAN HOSPITAL ASSOCIATION

PRESIDENT'S page

"Can society, or government, or both reshape the patterns of medical care any better than the evolvement of the past 30 years?"

CHARLES D. MULLER, M.D.

A Perspective

"If our present system is to survive, it's superiority must be clearly demonstrated." Luke Hill admirably and courageously defined the choice between voluntary or government dominated medicine. If there were no doubts in his mind or the minds of many introspective physicians about which was best for the patient, then there would be no choice or discourse. What do we really fear? Why are we anxious? Why are we defensive? Perhaps the unknown of the future darkens the known present. Can society, or government, or both reshape the patterns of medical care any better than the evolvement of the past 30 years? No doubt the shifting social scene has been a source of anxiety to many physicians. Most would quickly admit their concern with the changing patterns of medical care and just as quickly attribute these changes to such factors as governmental intervention (Medicare); trends in medical and nursing education (with too much emphasis on research, too much specialization, a failure to produce general practitioners), third party pay systems; increasing involvement of hospitals affecting and regulating physicians. The impact of these developments has been profound, and if there are emotional components to physicians' responses, it is understandable. Unfortunately, most of our energies have been dissipated by vigorous efforts on these symptoms of change rather than in directing our efforts to the primary forces. For if we are to guide our destinies, we must command more understanding of the forces with which we must deal. Among these are our own actions, reactions, and feelings. The exploding population (a creation of our own technology) is by all odds the most powerful force behind the pressures that have affected and will continue to affect the patterns of medical care—all else is secondary.

This process requires a new approach on our part. Sometimes the decisions reached are less important than how and when and to whom they are presented. So a directional approach which meets the needs of our current situation and will be productive within and without the profession is currently desirable.

All the things we want to say about patient care, quality care, physician responsibility and dedication may be better stated with the assistance of other disciplines. For example: In a recent discussion of the delivery of health services, an educational psychologist developed several thoughts that stressed the necessity of maintenance of the patient-physician relationship in a far better and far more objective manner than most physicians would be likely to employ in expressing the idea. This same assistance from other disciplines can be fostered among economists, sociologists, demographers and others involved in attempts to solve problems in the distribution of health services.

What we physicians have to say about medical economics and medical sociology may well turn out to be better said publically in our behalf by economists and others who have become interested and informed in these aspects of medical care and who have had the benefit of the expertise of physicians in the actual rendering of care and in the scientific and social aspects of care, treatment and healing processes.

We are massively engaged in efforts along these lines through our Association and through the Washington State Medical Education and Research Foundation.

At the same time, we also are massively and effectively engaged in more traditional activities along pragmatic lines. These activities make a current contribution to the public interest and to the profession and are essential to our discharging our responsibilities as physicians, per se. They also contribute to our stance among the other disciplines mentioned above, and among various segments of our communities and legislative bodies.

All of our efforts are in full bloom now. We can reach our goals and objectives if we can continue to give all aspects expert care and feeding. The outlook for continuing strength by virtue of our outgoing attitudes and involvements will undoubtedly rally others to our cause by their own volition and thinking on our problems; but only if we succeed in projecting our expertise in an acceptable manner. ■

Charles D. Muller M.D.

HENRY NELSON HARKINS, M.D.
1905-1967

Henry N. Harkins was born in Missoula, Montana, July 13, 1905, the only son of William Draper Harkins and Anna Louise Hatheway. In 1912, the family moved to Chicago where his father became the Andrew MacLeish Distinguished Service Professor of Physical Chemistry at the University of Chicago. As a consequence of this move, he attended the John Dewey Experimental School of the University of Chicago and was graduated from the University of Chicago High School in 1921. He then enrolled at the University of Chicago and was graduated in 1925, with a major in chemistry and a minor in mathematics. He had entered Rush Medical College in 1924, was graduated in 1930, and the M.D. degree was conferred following a two-year rotating internship at Presbyterian Hospital. During this active developmental period in Dr. Harkins' life, he additionally received an M.S. degree in chemistry in 1926, and a Ph.D. degree in Medicine in 1928, both from the University of Chicago.

His residency years, 1931-1936, were spent at the University of Chicago Clinics. During this period, six months were spent in Europe at National Hospital, Queens Square, London, and in the Departments of Research Surgery and Pharmacology; University of Edinburgh. He was Chief Resident and Instructor in Surgery at the University of Chicago Clinics from 1936-1938.

As a John Simon Guggenheim Memorial Fellow in Surgery, 1938-1939, Dr. Harkins traveled and worked in 14 countries, although his work was divided chiefly among four universities: University of Edinburgh; University of Ghent; University of Frankfurt-am-Main and University of Uppsala, Sweden. The subject of his fellowship was surgical and traumatic shock, particularly as seen in burns. This period was used advantageously to assemble the thoughts and data on burns that resulted in his first book.

Upon his return to this country, he became an Associate Surgeon at the Henry Ford Hospital, Detroit, 1939-1943. During the last year of this association, he was Special Instructor in Surgery at Wayne University Medical School. During this era he developed special interest in surgical treatment of varicose veins and hernia.

Dr. Harkins had been in the Army Medical Reserve for years. Upon U.S. involvement in World War II, his desire to serve outweighed the objections of his chief and he applied for commission, but was rejected by the Army for physical reasons. He was frozen in position at the Henry Ford Hospital.

Only the persuasiveness of Alfred Blalock, then Chief of the Department of Surgery at Hopkins, could have convinced Dr. McClure, at the Ford Hospital, that the Hopkin's need was greater than that in Detroit. Dr. Harkins accepted the invitation to join Dr. Blalock's staff with pleasure and anticipation of opportunity to explore new fields of knowledge. He served as Associate Professor of Surgery at Johns Hopkins University from 1943-1947, with the exception of a three-month period spent at Yale

University School of Medicine as Research Assistant and Assistant Professor of Physiological Chemistry. His experiences both in surgery and committee work were to serve him well in his subsequent opportunity.

In 1947, Dr. Harkins began a new career at the University of Washington School of Medicine in Seattle as Professor of Surgery and first Chairman of the Department. Aside from the Dean, Dr. Harkins was the first full-time clinical appointee of the new school. He exerted an important influence in many of the subsequent appointments and, indeed, helped guide the initial development of this school. They were arduous years. They were frustrating years. They were filled with time-consuming responsibilities, tangential to a surgeon's interest, yet productive years for both the School and the Department of Surgery. It was a time of self-sacrifice; of recruiting for the School and the Department, of developing the School's curriculum and the Department's contributions to it. A time for architects and blue prints; for defining one's position in the School as well as defining the School's position in the local medical community; a time for organizing a Department, the research laboratories and the doing of research.

It was also a time for training the residents to appreciate the pleasures of research and of writing papers. As Surgeon-in-Chief of the King County Hospital, before the University Hospital was built, he exerted continuous effort to improve the clinical services to satisfy the needs of the student, intern, and resident teaching. During this period, he served as a Consultant to Veterans Administration Hospitals in Spokane and Seattle, Army's Madigan General Hospital in Tacoma, and the Bremerton Naval Hospital.

In December of 1957, Dr. Harkins suffered a myocardial infarction. Initially, it was not a severe attack, and he considered this affair as having nuisance value only. He carried on his usual activities from his oxygen tent. His secretary came to the hospital with a briefcase filled with work and always left with more to be done, including instructions and dictation. An extension of his coronary occlusion obliged him to accept a more orthodox rest program. When he realized the importance of relinquishing the reins and could relax, an uneventful recovery began. Unwilling to admit weakness and unable to curb his restless drive, he gradually picked up the loose ends until his pace was the same as before.

In 1964, he resigned as Chairman of the Department. He loved to travel and helped to carry the image of American surgery to many far-off lands. While he enjoyed this activity, he also worked hard in giving of himself. He made many friends for this country and his university.

As one surveys his accomplishments, one cannot help but be genuinely impressed. He published over 360 articles on surgical subjects. His changing interests in various periods of his academic career are easily identified. Early major contributions dealt with burns, freezing, shock, and groin hernias. In his later years, the problems of the gastrointestinal tract and especially gastric physiology, peptic ulcer and the Billroth I operation dominated his thinking. His latest articles reflect an enthusiastic inquiry into the research and clinical aspects of selective vagotomy. Additionally, he wrote many chapters in different textbooks for other editors, and was co-editor of many of the most significant surgical texts published during the past two decades.

He was Editor-in-Chief of the Quarterly Review of Surgery (renamed Review of Surgery, 1962) from 1943 until his death. He served on both the Editorial Boards of Annals of Surgery and the Western Journal of Surgery (renamed Pacific Medicine and Surgery, 1964) from 1948 on. He had also served as the Managing Editor of the Bulletin of the Johns Hopkins Hospital from 1944-47.

He served almost continuously from 1946 as a Special Consultant of the National Institutes of Health; Hematology Study Section, 1946-48; Surgery Study Section, 1950-55; General Medicine Study Section, 1960-65; and as Secretary of a Subcommittee on Shock for the National Research Council, 1943-45. He was a member of the Board of Regents of the National Library of Medicine, 1962-66.

Dr. Harkins was the McGraw Lecturer, Wayne University, 1941; Irons Lecturer, University of Chicago, 1942; Clagett Lecturer, University of Colorado, 1955; Phemister Lecturer, University of Chicago, 1960; Hale-McMillan Lecturer, Meharry Medical College, 1962; Judd Lecturer, University of Minnesota, 1964; Lee Lecturer, University of Pennsylvania, Graduate School of Medicine, 1964; first Annual Rives Lecturer, Louisiana State University, 1965; Kelsey-Leary Lecturer, Baylor University College of Medicine, 1965; Marnock Lecturer, University of Aberdeen (Scotland) 1966; and Samuel D. Gross Lecturer, University of Louisville, 1967.

Visiting Professorships were as follows: University of Cincinnati, 1960; First visiting Professor of Surgical Research, Marquette University, 1962; Visiting Professor, Honolulu Integrated Surgical Residency Program, 1963; Ball Professor of Surgery, University of Indiana, 1965; Sir Edwin Tooth Visiting Professor of Surgery, University of Queenland, Brisbane, Australia, 1965; First Swedish Government Visiting Professor of Surgery, University of Lund, 1965, University of Gothenburg, 1966. While he was based primarily at these two Universities he visited, with one exception, the medical schools of *all of Sweden as well as other medical centers. During this visit he was honored as the Acrel Medallist by the Swedish Surgical Society. In 1967, he was Visiting Professor, University of Mississippi.*

Partially as a result of his second John Guggenheim Memorial Fellowship in Surgery, directed toward Gastric Physiology as Applied to Gastric Surgery for Duodenal Ulcer, he began a trip that took him around the world one and a half times, 1965-66. While visiting many other distant centers, he served as Visiting Professor at the Universities of Melbourne, New South Wales, Sydney and Adelaide, University of Kuala Lumpur, University of Witwatersrand, South Africa, University of Singapore, University of Auckland, University of Dunedin, New Zealand and University of Uppsala, Sweden.

He was a member of seventeen medical societies; a founder member of the Central Surgical Association, the International Surgical Club and the Surgery Biology Club; and second Vice-President of the American Surgical Association, 1957-58. He was active in the American College of Surgeons, especially at the national level, and served as President of the Washington State Chapter, 1957-58. He was an honorary member of many surgical societies in this country in addition to the Norwegian Gastroenterological, the Barcelona Surgical and the Thessaloniki Medical Societies abroad. He was made a corresponding Member of the Hellenic Surgical Society, 1966 and the Surgical Research Society of Australasia, 1966.

His accomplishments have been listed as a matter of record. It is patently redundant to say Henry Harkins was a surgeon and spirited teacher, outstanding investigator, student and scholar of the highest order, and important contributor to the world-wide medical scene. These talents were always in great demand, as evidenced by a calendar of commitments both in this country and abroad extending into late 1969.

He was an energetic and persevering man, with great determination — a gentleman, generous and kind. He was a gentle person, never ruffled, always soft-spoken. Only rarely could one perceive any impatience. He chided gently with an impish sense of humor. At times one was unsure whether he was laughing at you, with you, or at himself.

Reminiscent of his days in Big Ten competition as a member of the University of Chicago swimming team, he always enjoyed a swim. Dr. Harkins also was a fine golfer. As a holdover from his athletic days, he often carried a stopwatch to collegiate track events, and also into meetings where residents were rehearsing papers of usually ten minutes' duration for presentation at national meetings. In addition to the stop watch, a loaded cap pistol would shoot into the air, shattering the ego of the essayist who had strayed beyond his allotted period. Preciseness was a special trait which he treasured and appreciated in others. The correctness of one's facts and one's spelling of these facts were two areas conductive in his happiness. He cared very much how you spelled Heineke-Mikulicz. All sports at the University of Washington were followed with enthusiasm and he had been known to sneak over to the nearby basketball pavilion when the state high school basketball tournaments were being held. Despite this seeming dereliction of duty, he occasionally dictated letters on his portable dictaphone during lulls in sporting events. The background noises created considerable confusion among the secretaries until the source was identified. Time was precious, and he wasted little.

He enjoyed the Annual Departmental Picnic—a time when the families of all the members of the Department, both professional and non-professional, get together for a day of fun. Year after year, he took special pleasure in unobstrusively visiting each family group, much like a benevolent pastor looking after his flock. No one could have anticipated that the August 1967 Surgery Picnic was to be his last. It had been a delightful day, and, as usual, he was having a wonderful time. Those who say that waterskiing was a foolhardy thing for him to do that day have underestimated the pride and competitiveness of the man who refused to be defeated.

A photograph taken perhaps five minutes after his run, still in bathing suit, dripping wet, squinting into the sun, a broad smile crinkling his face gives mute testimony to his satisfaction in his accomplishment. Minutes later, at 4:10 p.m., he crumpled to the ground, unconscious. Resuscitative attempts were immediately begun and continued in an ambulance headed for the University Hospital. Despite successful defilbrillation and stabilization of his vital signs, his condition deteriorated and he died of a presumed coronary occlusion, August 12 at 3:04 a.m., without having regained consciousness.

Henry Harkins was buried on one of Seattle's hills facing East toward the snow-capped Cascade Mountains, beyond which he was born, reared and educated; in clear view of Lake Washington where he enjoyed his last of many swims; and overlooking the beautiful campus of the University of Washington where he spent his most productive years.

He was born and bred to the academic, and the academic life seemed tailored for him. ■

K. Alvin Merendino, M.D., Ph.D.

ERRATA

The initials *C. G. A.* should have appeared at the end of the editorial on page 1021 of the November issue. The editorial was written by Carl G. Ashley, a member of the Editorial Advisory Board. Authorship of editorials is indicated by initials only if written by one whose name appears on the masthead page. Editorials written by others are signed by full name. Dr. Ashley's initials were on copy, galley proof, and page proof, but the printer omitted them when the editorial page was locked up.

Listing of the article "Science of the Stall" by Richard F. Morton, appearing on page 1056 of the November issue, was omitted from the table of contents, due to error in the editorial office. This is regrettable as many of those who discovered the humorous article have commended it highly. Ed.

DR. LESTER L. LONG, *77, of Seattle, died September 7. Dr. Long was born in Illinois. He was a 1915 graduate of the College of Medicine and Surgery, Chicago, Illinois, and was licensed in 1929. Dr. Long was a veteran of World War I. Cause of death was ruptured arteriosclerotic abdominal aneurysm of the aorta.*

DR. HILBRAND J. HARDS, *86, of Tacoma, died September 23. Dr. Hards was born in Greenville, Michigan. He was a 1906 graduate of the University of Michigan Homeopathic Medical School and was licensed in 1908. He was a veteran of World War I. Cause of death was acute cerebral vascular accident.*

DR. HAROLD W. HUMBERT, *49, of Federal Way, died September 12. Dr. Humbert was born in Dodge City, Kansas. He was a 1955 graduate of The University of Kansas Medical School and served his internship at Swedish Hospital, opening the Bow Lake Medical Center in 1957. He was a veteran of World War II. Cause of death was alveolar cell carcinoma of the lung.*

WE SHALL FAIL GREATLY OR SUCCEED GREATLY

"We Americans have many grave problems to solve, many threatening evils to fight, and many deeds to do, if, as we hope and believe, we have the wisdom, the strength, the courage, and the virtue to do them. But we must neither surrender ourselves to a foolish optimism, nor succumb to a timid and ignoble pessimism. Our nation is that one among all the nations of the earth which holds in its hands the fate of the coming years. We enjoy exceptional advantages, and are menaced by exceptional dangers; and all signs indicate that we shall either fail greatly or succeed greatly. I firmly believe that we shall succeed; but we must not foolishly blink the dangers by which we are threatened, for that is the way to fail. On the contrary, we must soberly set to work to find out all we can about the existence and extent of every evil, must acknowledge it to be such, and must then attack it with unyielding resolution. There are many such evils, and each must be fought after a separate fashion; yet there is one quality which we must bring to the solution of every problem,—that is, an intense and fervid Americanism. We shall never be successful over the dangers that confront us; we shall never achieve true greatness, nor reach the lofy ideal which the founders and preservers of our mighty Federal Republic have set before us, unless we are Americans in heart and soul, in spirit and purpose, keenly alive to the responsibility implied in the very name of American, and proud beyond measure of the glorious privilege of bearing it."

Theodore Roosevelt

IDAHO

Idaho Medical Association —407 WEST BANNOCK ST., Boise, Idaho 83702

PRESIDENT *James R. Kircher, M.D., Burley*
SECRETARY *William R. Tregoning, M.D., Boise*
EXECUTIVE SECRETARY *Mr. Armand L. Bird, Boise*
Annual Meeting, June 26-29, 1968, Sun Valley

IMA Meets at Burley

President James R. Kircher presided at the first meeting of officers and councilors since the annual meet of the Association held at Sun Valley last June.

Attending the Burley meeting were: President-Elect O. D. Hoffman, Rexburg; Immediate Past President A. Curtis Jones, Boise; Secretary-Treasurer William R. Tregoning, Boise; Councilor John M. Ayers, Moscow; Councilor J. B. Marcusen, Nampa; Councilor George W. Warner, Twin Falls; Councilor John E. Comstock, Pocatello; AMA Alternate Delegate Donald K. Worden, Lewiston; Speaker of the House of Delegates Dauchy Migel, Idaho Falls; Chairman of the 1968 Program Committee, Roy O. Shaub, Twin Falls, and President of the IMA Woman's Auxiliary, Mrs. Dauchy Migel, Idaho Falls.

Personal appearances were made by: Lloyd S. Call, Pocatello, representing the Intermountain Regional Medical Program of the University of Utah College of Medicine; Attorney General Allan G. Shepard, Boise; Deputy Attorney General Michael Southcombe, Boise; Chairman of IMA's Industrial Medical Committee James J. Coughlin, Boise; Member of the IMA Industrial Committee, Richard P. Sutton, Burley; WICHE Commissioner Martha D. Jones, Boise; IMA Certified Public Accountant Mr. Charles O. Brady, Boise and W. B. Ross of the Idaho Foundation for Medicine and Biology who discussed the Utilization Review Project and the Health Science Information System.

Highlights of the session included approval of a comprehensive report of the 75th annual meeting, plans for the 76th annual meeting to be held at Sun Valley June 26-29, 1968, and plans to have House of Delegates Committee Chairmen meet with the officers and councilors prior to the annual meeting of the House of Delegates.

Ways and means to resolve membership delinquency problems were considered and referred to the Bylaws Committee. The 1968 budget, based upon the new dues structure was approved. Medical-legal problems were discussed with Attorney General Allan Shepard. Plans for the North Idaho Medical Service Bureau to continue as the Fiscal Agent for the expanded Dependents Medical Care Program, and Civilian Health and Medical Problems of the Uniformed Services (CHAMPUS), were approved. A resolution suggesting amalgamation of the two medical service bureaus into a statewide Blue Shield Program was also approved.

Design New IMA Seal and Win $50.00 Bond

A proposal to sponsor a contest for physicians and their families was adopted at the September meeting of IMA Officers and councilors. The purpose of the contest is to design a new seal for the Idaho Medical Association. The Association offers a $50.00 bond to the winning artist.

The information to be included in the new seal is:

Idaho Medical Association
Established 1893
Incorporated 1967
The Caduceus or Staff of Aesculapius

Participants in the contest may send their drawings to Idaho Medical Association, 407 West Bannock, Boise, Idaho 83702.

The $50.00 bond will be awarded at Sun Valley, June 29, 1968.

Martha D. Jones Appointed

Martha D. Jones, Boise, has been appointed to a six-year term as an Idaho Commissioner for the Western Interstate Commission for Higher Education. Dr. Jones was originally appointed November 7, 1966 to fill the unexpired term of Alfred M. Popma who resigned.

Other Idaho WICHE Commissioners are Ernest W. Hartung, Ph.D., President of the University of Idaho, and William E. Davis, Ph.D., President, Idaho State University.

Program on Immediate Care Presented at Pocatello

A program on "Immediate Care of the Sick and Injured" was presented in September at Pocatello under the sponsorship of the Idaho Medical Association, the Trauma Committee of the American College of Surgeons and the Idaho Department of Health. A similar program was presented at Boise in May for people likely to be on accident scenes, such as law enforcement officers.

Attending the program were: John R. McMahon, President Southeastern Idaho District Medical Society, Pocatello; Richard O. Vycital, Chairman Idaho Trauma Committee, Boise; Richard B. Gresham, Jay P. Merkley, Donald B. Roberts; Robert W. Loehning, S. Wayne Smith, E. V. Simison, Richard K. Gorton, Melvin M. Graves, H. Kent Staheli, James S. Sullivan, Dennis L. Wight, John S. McMillin, David A. McClusky, William H. Woodson and Russell Tigert, Jr.

IMA Represented at Wyoming Meet

The Idaho Medical Association was represented at the 64th annual meeting of the Wyoming State Medical Society, held at Jackson Lake Lodge, by President James R. Kircher and President-Elect O. D. Hoffman.

The 14th Rocky Mountain Medical Conference was held in conjunction with the meeting with Max F. Bell, Chairman of the Association's RMMS Committee, attending.

The Idaho delegation entered an invitation to host the Rocky Mountain Conference in conjunction with the 77th annual meeting at Sun Valley to be held June 25-28, 1969. The invitation was accepted.

Others attending the session were: Mr. Armand L. Bird, IMA Executive Secretary, Boise; Dauchy Migel, House of Delegates and Mrs. Migel, Auxiliary President, Idaho Falls; Dr. and Mrs. P. Blair Ellsworth, Idaho Falls; Dr. and Mrs. Wendell Petty, Shelley; and Dr. and Mrs. Quentin L. Quickstad, Boise.

Continuing Medical Education Program

The Continuing Medical Education Program of the Ada County Medical Society, in cooperation with St. Luke's and St. Alphonsus Hospitals, is underway in Boise with weekly and special meetings on the calendar. The program, administered in the offices of the Idaho Medical Association by David M. Barton, Boise, presents local and visiting speakers.

Guest speakers have been Benjamin Felson, Cincinnati, Chairman, Department of Radiology, University of Cincinnati College of Medicine; J. B. Lynch, Galveston, Professor of Surgery, Plastic Surgery Department, University of Texas; David W. Smith, Seattle, Associate Professor of Pediatrics, University of Washington School of Medicine; John R. Blackmon, Seattle, Professor of Medicine, University of Washington School of Medicine.

Speaker from Boise have included Hugh V. Firor, "Surgical Management", J. Gordon Daines, "Application of Immediate Prostheses for Above and Below Knee Amputation", Mary L. Holden, "D & C: To Do or Not To Do"; Robert S. Smith, "Jejunal Interpositional Operations—A Presentation of Two Cases"; Roy J. Ellsworth, Harlan T. Thoreson and Howard E. Adkins, "Strabismus—Are Clarence's Eyes Really Crossed?"; H. A. P. Myers III, Bert T. Reed, B. I. Copple, and Noah W. Klein, "Current Office Immunizing and Newer Vaccines".

In connection with his part time assignment as Director of Continuing Medical Education, Dr. Barton attended a week-long workshop on Evaluation of Physician Learning and Education Programs, at the University of Illinois College of Medicine's Center for the Study of Medical Education, in September.

Doctors Cooperate in Medicare Program

"We feel success of the Medicare program has in no small part been due to the cooperation of Idaho's doctors and especially the Idaho Medical Association," said Mr. Joseph E. Karpach, Idaho medicare field director for Equitable Life Assurance Society of the United States. Mr. Karpach, describing the first year's operating experience, said the average time elapsing between receipt of a claim in the Boise office and Equitable's mailing of a benefit check is about 12 days, including time required to check the status of eligibility and deductibles, as compared to the national average of 18 days for processing Part B claims.

Mr. Karpach stated that Idaho residents 65 and older received $1,840,198.00 in benefits during the first year, and that the Idaho office is paying physicians at a rate of 400 claims per working day, or about 2,000 claims totalling more than $54,000 per week.

continued on page 1178

When the talk turns to oral contraceptives, it makes medical sense to remember low-dose Norinyl®-1.

(norethindrone 1mg. c̄ mestranol 0.05mg.)

Turn page for contraindications, precautions and side effects.

Reduction of oral contraceptive dosage to the lowest effective levels is a well-accepted principle of conservative medical practice. In keeping with this view, Norinyl is now also available as Norinyl-1, containing exactly one half the previous dosage of norethindrone and mestranol. Clinical experience has established that effective fertility control can be achieved with the same degree of reliability and safety with new Norinyl-1 when taken as directed.

What about switching patients from higher dosage forms?

In transferring patients to low-dose Norinyl-1 from higher-dosage oral contraceptives, some breakthrough bleeding may occur in the early cycles. In the majority of cases the bleeding episode is mild and self-limited. The long-term advantages of the lower dosage form should be weighed against the inconvenience of possible breakthrough bleeding in the individual patient.

Prescribing Information

Contraindications: Patients with any symptoms or history of thrombophlebitis, pulmonary embolism, liver dysfunction or disease, carcinoma of breast or genital organs, or undiagnosed vaginal bleeding.

Warnings: Discontinue medication pending examination if there is sudden partial or complete loss of vision, proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions, medication should be withdrawn. The safety of Norinyl-1 in pregnancy has not been demonstrated. If a patient misses two consecutive periods, pregnancy should be ruled out before continuing the medication. If she has not adhered to the prescribed schedule, pregnancy should be considered at the first missed period. Active ingredients of oral contraceptives have been detected in the milk of mothers who received these drugs; the significance to infants has not been determined.

Precautions: Pretreatment physical should include examination of the breasts and pelvic organs, as well as a Papanicolaou smear. If endocrine or liver function tests are abnormal during therapy, repeat tests are recommended after the drug has been withdrawn for two months. Following administration of drug, preexisting uterine fibromyomata may increase in size. Careful observation and caution are required for patients with symptoms or history of epilepsy, migraine, asthma, cardiac or renal dysfunction, cerebrovascular accident, psychic depression, and diabetes. In cases of undiagnosed vaginal bleeding, adequate diagnostic measures are indicated. Possible long-term effects of the drug on pituitary, ovarian, adrenal, hepatic or uterine function must await further studies. The physician should be alert to the earliest manifestations of thrombophlebitis and pulmonary embolism. The drug should be used judiciously in those young patients in whom bone growth is not complete. The age of the patient constitutes no absolute limiting factor, although treatment with Norinyl-1 may mask symptoms of the climacteric. The pathologist should be advised of Norinyl-1 therapy when relevant specimens are submitted.

Side Effects: The following have been observed with varying incidence in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms, breakthrough bleeding, spotting, change in menstrual flow, amenorrhea, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately postpartum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals, mental depression. Although the following side effects have been reported in users of oral contraceptives, no cause and effect relationship has been established: anovulation posttreatment, premenstruallike syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption, and itching. The following occurrences have been observed in users of oral contraceptives (a cause and effect relationship has neither been established nor disproved): thrombophlebitis, pulmonary embolism, neuroocular lesions.

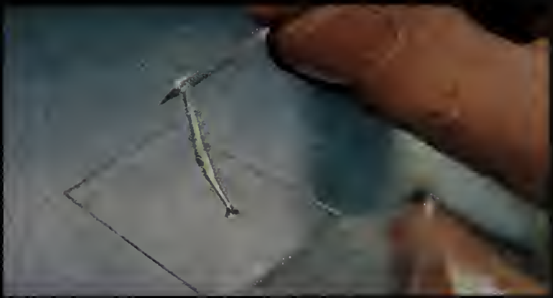
The following laboratory tests may be altered by the use of oral contraceptives: increased sulfobromophthalein and other hepatic function tests, coagulation tests (increase in prothrombin, factors VII, VIII, IX and X), thyroid function (increase in PBI and butanol extractable protein-bound iodine and decrease in T^3 values), metyrapone test, pregnanediol determination.

norethindrone — an original steroid from
SYNTEX
LABORATORIES INC., PALO ALTO, CALIF.

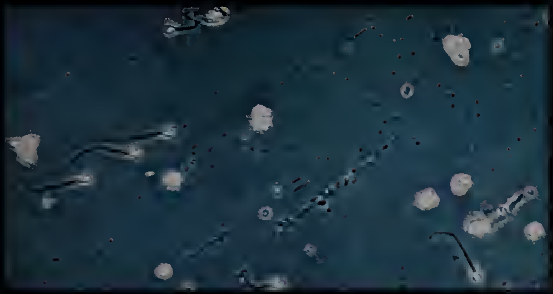
Here's why Norinyl-1 makes medical sense.

The effectiveness of Norinyl-1 as a low-dose oral contraceptive may be explained by its possible multiple action. In addition to its primary action of suppression of ovulation, Norinyl-1 may offer additional protective mechanisms... (1) creation of a cervical mucus that may be hostile to sperm penetration, and (2) development of an endometrium that may be out of phase with nidation. These effects are illustrated below.

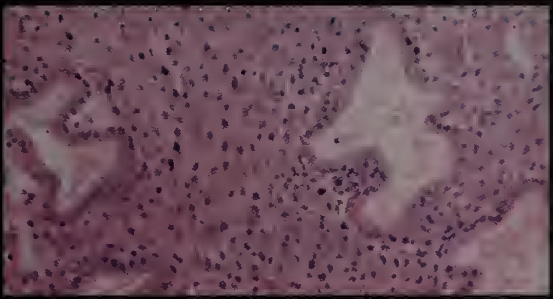
Untreated Patient



Cervical mucus at midcycle is usually thin and watery, with Spinnbarkeit (stretchability) of 15 to 20 cm.

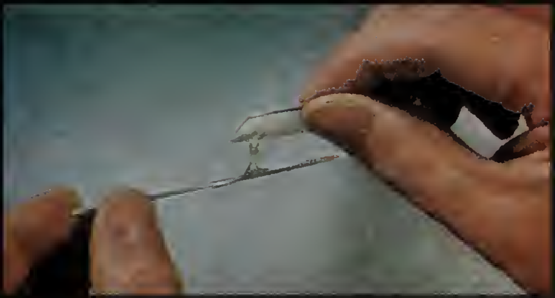


Spermatozoa appear healthy, active, freemoving.

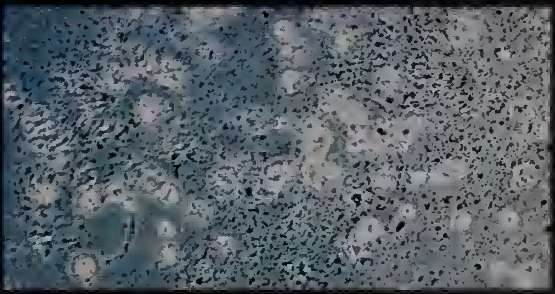


Endometrium of untreated patient is receptive to the fertilized ovum during secretory phase.

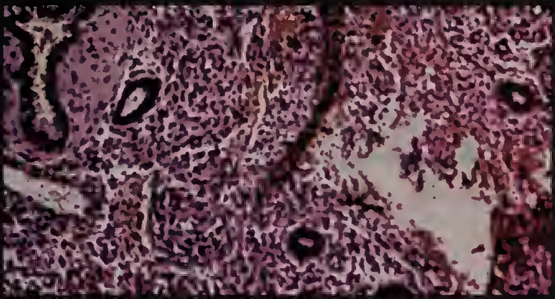
Norinyl-1 Patient



Cervical mucus at midcycle is scanty, viscous—with Spinnbarkeit of 1 cm. or less.



Immobile spermatozoa as they appear in cervical mucus taken from patient treated with Norinyl-l.



Norethindrone in Norinyl-l accelerates secretory phase, suppresses glandular and vascular development.

Norinyl®-1 tablets
(norethindrone 1mg. c̄ mestranol 0.05mg.)

- new low dose of time-proved ingredients
- established norethindrone/mestranol ratio
- lower patient cost

for the searing pain of "Shingles"...

PROTAMIDE®
(colloidal solution of denatured proteolytic enzyme)

Offers prompt pain relief

Relief of neuritic pain from *herpes zoster* (shingles) is prompt[1-3]—usually after the first few intramuscular[2] injections—particularly when therapy is administered early.[3,4] The duration of disability in many patients is often significantly shortened.[2] Postherpetic neuralgias—even in the elderly—rarely develop.[1,4] Complete pain relief is observed in most patients within 5 days.[2]

Administration in *herpes zoster:* one ampul (1.3 cc.) I.M. daily for 2 to 5 days. Caution: For intramuscular use only. Inadvertent I.V. administration may cause anaphylactoid reaction. Supplied: Boxes of 10 ampuls, 1.3 cc. each.

References:
1. Combes, F. C. and Canizares, O.: *New York State J. Med.* 52:706-708 (Mar. 15) 1952.
2. Xander, G. W.: *Western Med.* 1:14 (Sept.) 1960.
3. Baker, A. G.: *Penna. Med J.* 63.697-698 (May) 1960.
4. Lehrer, H. W., Lehrer, H. G., and Lehrer, D. R.: *Northwest Med.* 75:1249-1252 (Nov.) 1955.

Sherman Laboratories
Detroit, Michigan 48211

Idaho News Notes

third annual session

The Third Annual Scientific Session of the Caldwell and Nampa Medical Staffs was presented in September at Caldwell. Featured speaker was Robert F. Ryan, Associate Professor of Surgery at Tulane University School of Medicine, New Orleans.

five-day plan

A five-day plan using group therapy to help would-be non-smokers "break the habit" was conducted in Boise in September. Assisting with the program were: Donald M. Mack, Boise, who prescribed a diet for the participants, and Robert F. Holdren, Boise, who spoke on diseases of the chest brought about by the use of tobacco.

research fund awards

President of the Idaho Heart Association, Roy O. Shaub announced that $16,914.00 is available in research fund awards, including $5,202.00 for work at the Idaho State University, $3,350.00 for work at the University of Washington Medical School, and $8,500.00 in grants administered by the American Heart Association.

renewal fees

During the 90-day period for renewing licenses to practice medicine and surgery in Idaho, which ended October 1, 1967, a total of 1,000 physicians paid yearly renewal fees.

Of this total, 615 reside within Idaho and 385 reside outside the state. Eighteen were cancelled for failing to pay renewal fees.

Dr. Mangum honored

Thomas E. Mangum, Sr., was honored at a testimonial dinner attended by 300 people October 12, 1967, in Nampa. Dr. Mangum was honored for his work as a physician, in his church, and for his role in the founding of Samaritan Community Hospital and the Samaritan School of Nursing in Nampa. Those presenting tributes at the event included James R. Kircher, Burley, President of the Idaho Medical Association.

installed

Mr. Leon Felder, Administrator of St. Benedict's Hospital, Jerome, was installed as President of the Idaho Hospital Association at its annual meeting at Sun Valley, October 7-11. Sister M. Peter James, Administrator of St. Alphonsus Hospital, Boise, was chosen President-Elect, and Mr. E. Lynn Reed, Administrator of Bingham Memorial Hospital, Blackfoot, was named Secretary.

The Idaho Medical Association was represented at the meeting by President James R. Kircher, Burley, and Executive Secretary Bird.

continued on page 1183

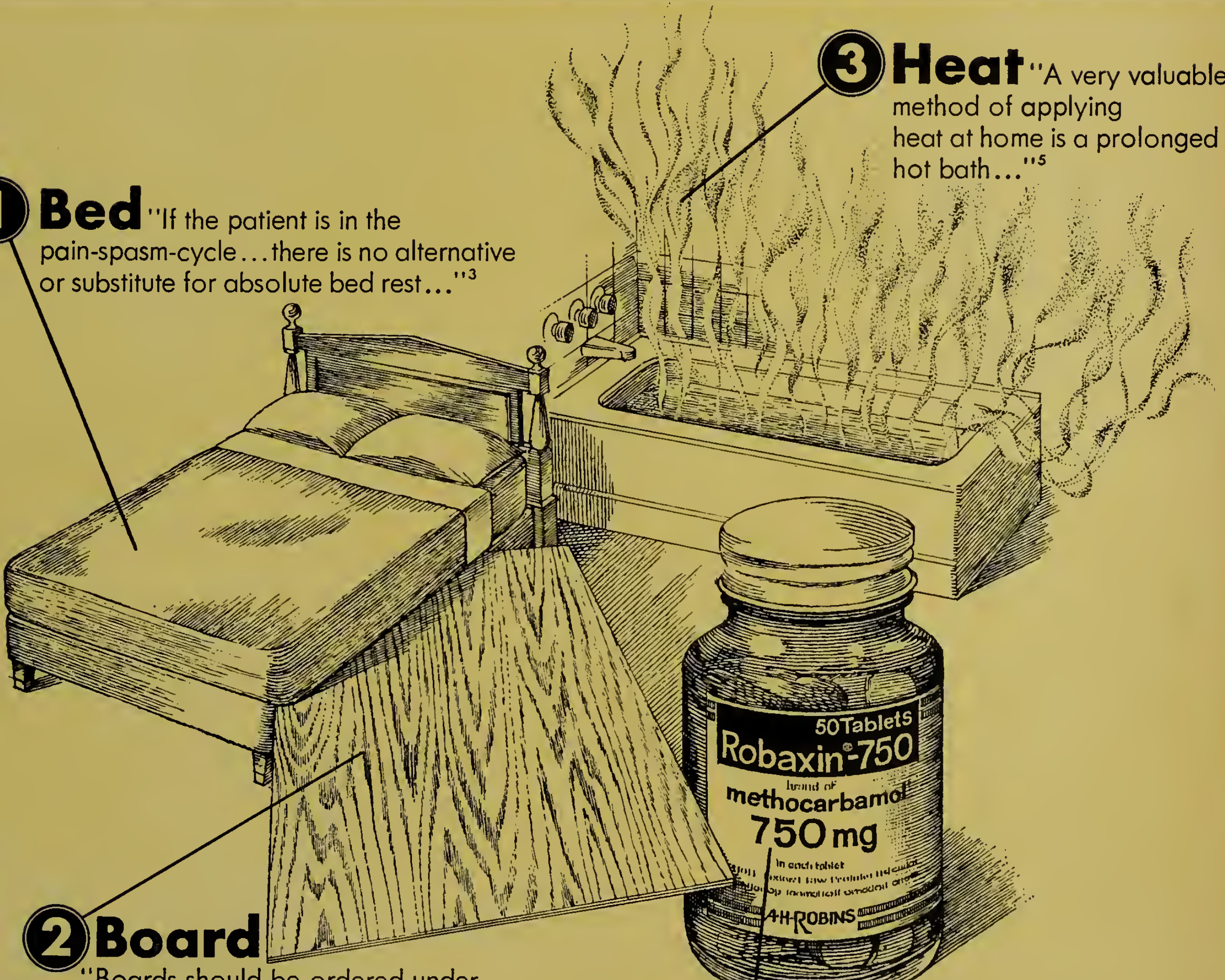
LOW-BACK PAIN

A CONSERVATIVE, FOUR-POINT PROGRAM

The low back pain that is most frequently seen in general practice is mechanical in nature, i.e., postural back pain, joint dysfunction and acute back strain.[1,2] For this type of discomfort, a conservative regimen is usually sufficient to relieve aches and pains, and to help keep the patient functioning. Components of this basic program include:

① Bed "If the patient is in the pain-spasm-cycle . . . there is no alternative or substitute for absolute bed rest . . ."[3]

③ Heat "A very valuable method of applying heat at home is a prolonged hot bath . . ."[5]



② Board "Boards should be ordered under the mattress . . . these boards act by immobilizing the spine . . ."[4]

④ Robaxin®-750 (methocarbamol, 750 mg. capsule-shaped tablets) A well-tolerated[6] skeletal muscle relaxant, methocarbamol helps relieve spasm ". . . without interfering with normal tone and movement."[7] And there is little likelihood of sedation.[6]

Indicated for relief of skeletal muscle spasm. **Contraindicated** in hypersensitive patients. **Side Effects** (lightheadedness, dizziness, drowsiness, nausea) may occur rarely, but usually disappear on reduced dosage. Hypersensitivity reactions develop infrequently. See product literature for further details. **Also available:** Robaxin® Tablets (methocarbamol, 500 mg.) Robaxin Injectable (methocarbamol, 1 Gm./10 cc.) **References:** (1). Godfrey, C.M.: Applied Therap. *8*:950, 1966. (2). Gottschalk, L.A.: GP 33:91, 1966. (3). Rowe, M.L.: J. Occup. Med. 2:219, 1960. (4). Cozen, L.: South Dakota J. Med. *18*:26, 1965. (5). Soto-Hall, R.: Med. Sc. *14*:23, 1963. (6). Weiss, M. and Weiss, S.: J. Am. Osteopath. A. 62:142, 1962. (7). Feuer, S.G., *et al.*: New York J. Med. 62:1985, 1962.

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RICHMOND, VIRGINIA 23220

Against these three major pathogens…

Pneumococci
Penicillin-Sensitive Staphylococci
Beta-Hemolytic Streptococci

V-Cillin K® provides dependable oral antibacterial therapy

because it combines a high degree of activity...

V-Cillin K has been shown to be effective in the treatment of streptococcus and pneumococcus infections as well as infections caused by sensitive strains of staphylococci. It may be used for the prophylaxis of streptococcus infections in patients with a history of rheumatic fever and for the prevention of bacterial endocarditis after tonsillectomy in patients with a history of rheumatic fever or congenital heart disease.

with high blood levels, even when taken with food

V-Cillin K is stable in acid and immediately soluble. High serum levels, therefore, are reached rapidly. Because it is acid stable, V-Cillin K is well absorbed even when taken close to mealtime. These desirable properties help make V-Cillin K a dependable penicillin for oral use.

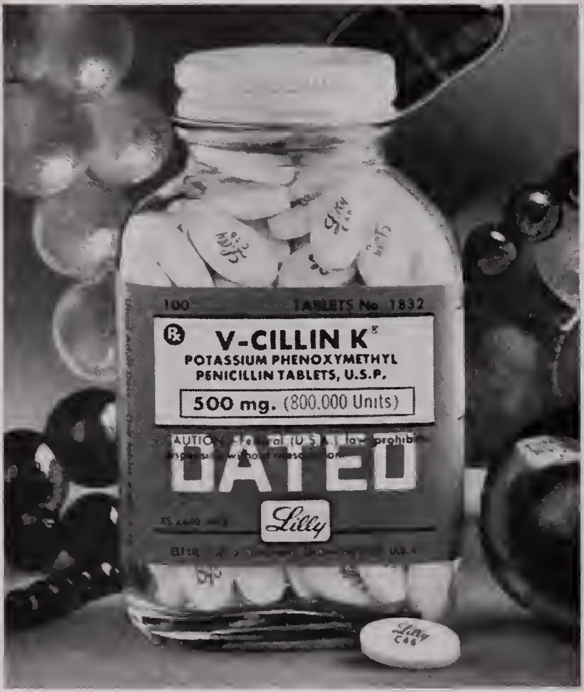
V-Cillin K® Lilly 701449

Potassium Phenoxymethyl Penicillin

Now available: V-Cillin K®, Pediatric, for Oral Solution, 250 mg. (400,000 units) per 5 cc. of solution.

(See next page for prescribing information.)

New 500 mg. tablets...a more convenient way to give high doses



Description: V-Cillin K, the potassium salt of V-Cillin® (phenoxymethyl penicillin, Lilly), combines acid stability with immediate solubility and rapid absorption. Higher, more rapid serum levels are obtained than with equal oral doses of penicillin G.

Indications: Streptococcus, pneumococcus, and gonococcus infections; infections caused by sensitive strains of staphylococci; prophylaxis of streptococcus infections in patients with a history of rheumatic fever; and prevention of bacterial endocarditis after tonsillectomy and tooth extraction in patients with a history of rheumatic fever or congenital heart disease.

Contraindication: Penicillin hypersensitivity.

Warnings: In rare instances, penicillin may cause acute anaphylaxis which may prove fatal unless promptly controlled. This type of reaction appears more frequently in patients with a history of sensitivity reactions to penicillin or with bronchial asthma or other allergies. Resuscitative drugs should be readily available. These include epinephrine and pressor drugs (as well as oxygen for inhalation) for immediate allergic manifestations and antihistamines and corticosteroids for delayed effects.

Precautions: Use cautiously, if at all, in a patient with a strongly positive history of allergy.

In prolonged therapy with penicillin, and particularly with high parenteral dosage schedules, frequent evaluation of the renal and hematopoietic systems is recommended.

In suspected staphylococcus infections, proper laboratory studies (including sensitivity tests) should be performed.

The use of penicillin may be associated with the overgrowth of penicillin-insensitive organisms. In such cases, discontinue administration and take appropriate measures.

Adverse Reactions: Although serious allergic reactions are much less common with oral penicillin than with intramuscular forms, manifestations of penicillin allergy may occur.

Penicillin is a substance of low toxicity, but it possesses a significant index of sensitization. The following hypersensitivity reactions have been reported: skin rashes ranging from maculopapular eruptions to exfoliative dermatitis; urticaria; and reactions resembling serum sickness, including chills, fever, edema, arthralgia, and prostration. Severe and often fatal anaphylaxis has occurred (see Warnings). Hemolytic anemia, leukopenia, thrombocytopenia, and nephropathy are rarely observed side-effects and are usually associated with high parenteral dosage.

Administration and Dosage: Usual dosage range, 125 mg. (200,000 units) three times a day to 500 mg. (800,000 units) every four hours. For infants, 50 mg. per Kg. per day divided into three doses.

See package literature for detailed dosage instructions for prophylaxis of streptococcus infections, surgery, gonorrhea, and severe infections.

How Supplied: Tablets V-Cillin K, U.S.P., 125 mg. (200,000 units), 250 mg. (400,000 units), and 500 mg. (800,000 units).

V-Cillin K, Pediatric, for Oral Solution, 125 mg. (200,000 units) and 250 mg. (400,000 units) per 5 cc. of solution (approximately one teaspoonful). [042567]

Additional information available to physicians upon request. Eli Lilly and Company, Indianapolis, Indiana 46206.

Lilly

701449

continued from page 1178

new officers

The new officers of the Ada County Medical Society for the coming year are : President, James H. Hawley, Boise; President-Elect, Leon W. Nowierski, Boise; Secretary, R. Bruce Moody, Boise; Treasurer, Bernard P. Strouth, Boise, and Council member-at-large, Dale D. Cornell, Boise.

Delegates whose terms expire 1968 are: S. Hugh Atchley, Harold W. Hatten, James H. Hawley and Mary L. Holdren.

Delegates whose terms expire 1969 are: H. A. P. Myers, Frank W. Crowe, Everett N. Jones, Jr., and Gerald N. Hecker.

Delegates whose terms expire 1970 are: David M. Barton, Clayton C. Morgan, Lawrence L. Knight, and G. E. Rosenheim.

Alternates whose terms expire 1968 are: Helen Beeman, J. J. Coughlin, Paul F. Miner, Robert D. Jenkins, J. Wayne Tyler, Miles E. Thomas, Dale D. Cornell, L. W. Nowierski, W. L. Venning, Martha D. Jones, R. F. Holdren, and David A. Weeks.

newly-elected

Officers of the Bonner-Boundary Medical Society for the coming year are: President Frederick W. Durose, Bonners Ferry; Secretary-Treasurer Fred E. Marienau, Sandpoint; Delegate Robert Durose; Alternate Delegate Marienau.

Officers of the Kootenai-Benewah Medical Society for the coming year are: President Conlyn J. Cederblom, Hayden Lake; President-Elect H. Don Moseley, Coeur d'Alene; Secretary-Treasurer Lynn C. Fredrikson, Coeur d'Alene.

The following physicians have been elected to membership in Component Medical Societies: Kootenai-Benewah Medical Society, Harold D. Thysell, Coeur d'Alene: Idaho Falls Medical Society, D. Ray Haywood and Lynn D. Weller.

speaker announced

Willis L. Hubler, Caldwell, Chairman of the Scientific Sessions for the Idaho Heart Association, has announced that scientific speakers for the annual meeting January 6-7, 1968, at Sun Valley, will be Herbert J. Semler, Portland, Director of the Cardiac Telemetry Station at St. Vincent's Hospital; Melvin P. Judkins, Portland, Associate Professor and Director of Cardiovascular Laboratory at the University of Oregon Medical School, and Yoshio Sako, Minneapolis, Chief, Cardiovascular Surgery Section, Veterans Administration Hospital. A symposium is also planned.

Many Attend Pocatello Meeting

Annual meeting of the Idaho Academy of General Practice at Pocatello, October 12-14 drew an attendance of more than 70 physicians. The program, as published in the September issue of this journal, was presented by an all-star cast from the University of Washington School of Medicine, under direction of John N. Lein, of the Department of Continuing Medical Education. The meeting was held in the Student Union Building of Idaho State University.

Officers for the ensuing year are: Aldon Tall, Rigby, President; P. Blair Ellsworth, Idaho Falls, Secretary. The next annual meeting will be in Idaho Falls, October 1968, final date to be determined later.

Dr. Simison appointed

E. V. Simison, Pocatello, a Past-President of the Idaho Medical Association and a former member of the Idaho State Board of Medicine, has been appointed the first Dean of the Idaho State University's new College of Medical Arts. The appointment was made by the Idaho State Board of Education and will become effective July 1, 1968. Long active in organized medicine, Dr. Simison served as Association President in 1953-54 and was one of the original members of the State Board of Medicine following enactment of the Medical Practice Act and served on the Board from 1949 to 1955. Dr. Simison is currently a member of the Association's Medical Education Committee, and the Medical Practice Act Review Committee. He is also a member of the Governor's Medical Education Study Commission.

graduate school planned

Representatives of Economic Research Associates, Los Angeles, have been in Boise gathering data for a study of factors affecting the advisability of and planning for a graduate school of medicine in Idaho. Collecting preliminary data for the report ordered by the Idaho Medical Education Study Committee are Mr. Daryl Butcher and Mr. A. Redmond Doms. Mr. Doms spent several days in the state office compiling statistics from Association records. The State Board of Education is to receive the report, which will cover feasibility, planning and cost of developing a medical school, on November 15, 1968, and will submit it, along with the board's recommendations, to the 40th Idaho Legislature.

Idaho News Notes

temporary licenses issued

Eight temporary licenses were granted in August, September and October. Receiving them were: Norman D. Sower, Boise. Graduate, Washington University School of Medicine, St. Louis, June 1957. Internship, Walter Reed General Hospital, Washington, D. C., June 1957-July 1958. Surgical Residency, Walter Reed General Hospital, September 1958-December 1962. Heidelberg, Germany, 1963-1967. Granted TL-396, September 25, 1967. General surgery.

David L. Matheson, Caldwell. Graduate, University of Washington School of Medicine, Seattle, June 1960. Internship, University of Texas Branch Hospitals, Galveston, July 1960-June 1961. Residency in Radiology, Virginia Mason Hospital, Seattle, 1964-1967. Granted TL-397, October 16, 1967. Radiology.

Robert B. Montgomery, Boise. Graduate, George Washington University School of Medicine, Washington, D. C., June 3, 1959. Internship, 1959-60, Surgical Residency 1960-61, University Hospital, District of Columbia General Hospital, 1961-62. Senior Resident, George Washington University Hospital, 1962-63; Chief Resident, D.C. General Hospital, 1963-64. Granted TL-398, October 16, 1967. General surgery.

Keith R. Dahlberg, Kellogg. Graduate, State University of New York, Upstate Medical Center, Syracuse, N.Y., June 6, 1954. Internship, Presbyterian Medical Center, Denver, 1954-55. Residency in Ob-Gyn, Presbyterian Hospital, 1955-56. Granted TL-399, October 26, 1967. General practice.

Gordon L. Cox, Idaho Falls. Graduate, New York University School of Medicine, New York City, June 1963. Internship, University of Wisconsin Hospital, Madison, Wisconsin, 1963-64. Residency in Pathology, University of Wisconsin Hospitals, 1964 to present. Granted TL-392, August 15, 1967. Pathology.

Donna L. Bell, Mountain Home. Graduate, Hahnemann Medical College, Philadelphia, Pennsylvania, June 1966. Internship, Harrisburg Hospital, Harrisburg, Pa., 1966-67. Granted TL-393, August 18, 1967. General practice.

John D. Ross, Nampa. Graduate, University of Arkansas School of Medicine, Little Rock, Arkansas, June 1956. Internship, U.S. Army Tripler General Hospital, Honolulu, Hawaii, 1956-57. Residency in Ophthalmology, Tulane Graduate School of Medicine Basic Science, 1958-59. New Orleans Eye, Ear,

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Nose and Throat Hospital, New Orleans, La., 1959-62. Granted TL-394, August 21, 1967. Ophthalmology.

Richard M. Alford, Lewiston. Graduate, University of Michigan Medical School, Ann Arbor, Michigan, June 1949. Internship, Research Hospital and Medical Center, Kansas City, Missouri, 1949-50. Rotating Residency, Ravenswood Hospital, Chicago, Ill., 1952-53. Granted TL-396 September 6, 1967. General practice.

Catholic guild meets

Kenneth A. Tyler, President, Gooding, presided at a meeting of the Catholic Physicians and Dentists Guild of Idaho in Boise October 16. Guest speaker was Sibley Hoobler, Ann Arbor, Professor of Medicine at the University of Michigan and overseer of a project of aid to support a native physician in Nahuala, Guatemala. The Guild had pledged $225.00 a month for one year in support of the project, and Dr. Hoobler has secured a like amount from a nonprofit Michigan foundation. The next meeting of the Guild will be held in June, 1968 at Sun Valley in connection with the 76th annual meeting of the Idaho Medical Association.

IMA represented at Arizona meet

Seven Idaho physicians represented the Idaho Medical Association at the Invitational Western Conference on Future Directions and Decision in Medical Care at Chandler, Arizona, November 10-12, 1967. The conference was under the direction of the California Medical Association's Education and Research Foundation.

Attending were President James R. Kircher, Burley; President-Elect O. D. Hoffman, Rexburg; Past-President A. Curtis Jones, Boise; Councilor J. B. Marcusen, Nampa; Kim O. Johnson, Idaho Falls; and Francis H. Fox, Twin Falls, members of the Association's Board of Health Advisory Committee.

OBITUARY

DR. ALBERT B. PAPPENHAGEN, *73, Orofino, a past president of the Idaho Medical Association, died at the Clearwater Valley Hospital October 23, 1967.*

Dr. Pappenhagen, who practiced medicine and surgery at Orofino for the past 38 years, was President of the Idaho Medical Association in 1948-49 and was active in medical, community and state affairs.

Born February 2, 1894 at Perrysburg, New York, he was graduated from Allegheny Colleye at Meadville, Pennsylvania in 1917. After graduation he enlisted and served as an Army sergeant in France.

Dr. Pappenhagen received License No. M-1353 to practice medicine and surgery in Idaho on April 30, 1930, and began practice in Orofino. He received his M.D. degree from Northwestern University Medical School, Chicago, in 1927, and interned at the Norweigan American Hospital. He was one of the first residents in orthopedic surgery at the Chicago Shrine Hospital.

He served on the Idaho Medical Association's Industrial Medical Committee, the Medical Benevolent Committee, and was Alternate Delegate to the state association from the North Idaho District Medical Society. He was a member of the American Medical Association, the American College of Surgeons, and was a Fellow in the Spokane Surgical Society.

Dr. Pappenhagen was a member of the Hospital Advisory Council to the State Department of Health and a member of the Advisory Committee on Care of the Blind. He had also served as a member of the Orofino City Council.

He was active in promoting and securing accreditation for the Clearwater Valley Hospital, and closed the Orofino Hospital, which he owned, when the new hospital opened in 1957. He was a member of Orofino Masonic Lodge No. 69, the Scottish Rite bodies and Callam Temple of the Shrine at Lewiston. He was a member of the Elks Lodge and the Veterans of Foreign Wars.

GENERAL NEWS

Rural Health Conference Interest Grows

Harold L. Amos, Ph.D.

J. Cuthbert Owens, M.D.

Mr. Allan R. Johnson

For a number of years it has been apparent that there is not much difference between health problems in rural areas and those in the cities. For this reason, a rural health conference is of much interest to anyone concerned about the provision of care in either urban or rural setting. Attendance can be a refreshing experience.

The program planned for the Rural Health Conference to be held in Seattle, March 29-30, 1968, promises to maintain the record of enjoyable sessions. Included in the list of speakers is Harold L. Amoss, Ph.D., of the Bureau of Community Development, University of Washington. He will discuss community involvement in health planning.

Also on the program is Mr. Allan R. Johnson, well known Director of the Washington State Grange, who will lead a group discussion on special problems in accident prevention in rural areas.

A subject of interest to anyone who is apt to see emergencies is the problem of emergency communication. It will be discussed by J. Cuthbert Owens, Professor of Surgery at the University of Colorado School of Medicine.

The meeting will be held at the Olympic Hotel.

correspondence continued from page 1193

Treatment of Tuberculin Reactors

Editor, NORTHWEST MEDICINE:

Dr. Greenleaf's letter to the Editor appearing in Northwest Medicine for October, 1967, refers to a statement by an Ad Hoc Committee on Chemoprophylaxis published in American Review of Respiratory Diseases for September 1967. Unfortunately his letter misquotes the article and does not give complete recommendations for the duration of treatment as stated by the committee.

According to the committee report: "Every positive reactor is at some risk of developing active disease. Thus any person found to have a positive reaction of 10mm or more to the Mantoux test using 5 TU of P. P.D. should receive chemoprophyalaxis whenever he is identified."

The report qualifies this statement and establishes certain criteria for the use of chemoprophylaxis as Dr. Greenleaf indicates.

Isoniazid in the dose advised for adults and children should be continued uninterrupted for at least 12 months. Follow-up should be considered of maximum importance in keeping with the best medical practice.

The recommendations of the committee appear broad and a bit drastic at first glace, but they do represent an attempt to introduce a method whereby we may develop a generation uninfected with tubercle bacilli.

Sincerely yours,
W. R. MURLIN, M.D., *Director*
Tuberculosis Section
Oregon State Board of Health

CLASSIFIED ADVERTISEMENTS

All classified advertisements are set in the style of this journal. Each line and partial line is charged at $1.50.

Copy must be received by the advertising supervisor at the editorial office not later than the 15th of the month preceding date of issue. Proof is not shown. Copy of ad as it appeared in the journal accompanies billing.

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OPENING FOR GENERAL PRACTITIONER—In Medical Center, northwestern Washington. Economic outlook excellent. Medical Center established in same location many years. Write Box 17-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

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EXCELLENT GP OPPORTUNITY—To associate with 3 very busy practitioners. One with residency in surgery preferred. Financial arrangements open. Fully equipped office, good hospital facilities. Pacific Northwest, mouth of Columbia River, Astoria, Ore. Write Box 40-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

RADIOLOGIST—Certified in diagnosis and therapy or eligible, to join well established rediologist in beautiful Puget Sound country in Washington State. Live in vacation scenery and climate the year round. County population 100,000. Hospital and office practice established for 21 years. Generous compensation to start, with full partnership planned after 10 to 12 months trial association. For details if seriously interested, write Box 35-C, Northwest Medicine, 500 Wall St., Seattle, Wash. 98121.

SEMI-RETIRED GP WANTS ASSOCIATE—Younger man to whom he can gradually turn over his practice. Suburban area of Tacoma, 1 block from hospital. Low overhead, good location in fine residential area. Phone collect or write L. E. Skinner, M.D., 5920 - 100th St., S.W., Tacoma, WA. 98499. JU 4-3338.

WE NEED YOU—The Whatcom Medical Society is seeking physicians, particularly in general practice, and pediatrics. Bellingham, is located 90 miles north of Seattle and 60 miles south of Vancouver, British Columbia. It is at the northern end of Puget Sound, and adjacent to the San Juan Islands. Skiing, hunting, fishing and boating are just minutes away. We feel there are excellent opportunities for qualified physicians both in and around Bellingham. We will be happy to furnish information if you will write Whatcom County Medical Society, Suite 512, Herald Building, Bellingham, WA. 98225.

ANESTHESIOLOGIST—Board certified or elegible urgently needed for 80-bed new JCAH accredited hospital. In resort town of 14,000 population on Interstate 5, S.W. Oregon. Fee for service; supervise two nurse anesthetists. Write Box 8-A, Northwest Medicine, 500 Wall St., Seattle, WA. 98121.

PHYSICIANS—Industrial practice internationally renowned most progressive company, excellent growth opportunity, N.Y.C., Los Angeles, San Francisco, New England and several smaller cities. $20-25,000, moving and placement fees paid. Apply American Medical Personnel, 159 E. Chicago Ave., Chicago, Ill. 60611, Delores Susral, Director, Phone 312/337-4221.

GP FOR EASTERN WASHINGTON—To join well established general practitioner. Will be busy from the start. Salary first year, then partnership. Modern clinic building. Ideal climate and living area. Investigate now. Norman Rubens, M.D., Rt. 5, Box 272, Spokane, WA. 99208.

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WASHINGTON STATE UNIVERSITY, PULLMAN—Needs two general practitioners and one half-time psychiatrist to complete the staff of a busy University Health Service, which is housed in a fully accredited general hospital on campus. 11,200 students. Presently five full time physicians, part-time internist and psychiatrist, 11 month appointment. Malpractice insurance paid by University, matching retirement program, hospitalization, salary continuance and life insurance program available. Pleasant Eastern Washington climate. Hunting and fishing available. Excellent University atmosphere. This is an equal opportunity University. Washington license and Basic Science Certificate required. Salary competitive. Contact Ralph M. Buttermore, M.D., Director Student Health Service.

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ORTHOPEDIC SURGEON URGENTLY NEEDED—In rapidly expanding Auburn area. Office available in new professional center. Unlimited opportunity. Contact A. H. Bloom, M.D., 833-3650 or Mel Sinex, M.D., 833-3820. 1268 E. Main, Auburn, WA. 98002.

CONTINUING EDUCATION COURSES

CURRENT CONCEPTS IN CARDIOLOGY—An intensive program with special emphasis on coronary disease, indication and management of valvular replacement, diagnosis and management of cardiac arrhythmias, vector-cardiography and applied cardiovascular physiology. This program is being offered by the Institute for Cardiovascular Diseases at Good Samaritan Hospital, 1033 East McDowell Rd., Phoenix, Ariz. 85002 on Jan. 10, 11, and 12, 1968. The meetings will be held at the Del Webb's House in Phoenix, Ariz. The program director is Alberto Benchimol, M.D., with guest faculty: William M. Chardack, M.D., E. Grey Dimond, M.D., Darrell D. Fanestil, M.D., Dean Franklin, George C. Griffith, M.D., Paul Huganholtz, M.D., Albert Kaffus, M.D., C. Walton Lillehei, M.D., Oscar Magidson, M.D., Alfred Pick, M.D., and Robert L. Van Citters, M.D. This is an official Postgraduate Course of the American College of Cardiology. For information about this program, write Mr. William B. Nelligan, Executive Director for the American College of Cardiology, 9650 Rockville Pike, Washington, D. C. 20015.

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UNFINISHED OFFICE SPACE—In a clinic building now under construction across the street from Overlake Hospital, Bellevue, Wash. GL 4-8111.

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LA CASA DEL COMPO—Hunting and fishing lodge, wants 10 members. Fee $450 per annum. Landing strip. Deep River and Columbia River. Inquiries to Mr. M. Alvarez, 1611 Westlake Mall, Seattle. Phone MA 3-3474.

Meetings OF MEDICAL SOCIETIES

AMA Annual—San Francisco, June 16-20, 1968.

AMA Clinical—Houston, November 26-29, 1967; Miami Beach, 1968.

AMA Rural Health Conference, March 29-30, 1968, Seattle.

Oregon Medical Association—Oct. 1-4, 1968, Portland.

American Physicians, Society for Physiologic Tenson Control—Vancouver, B.C., May 16-19, 1968.
Pres. Herman A. Dickel, Portland
Sec., Robert Rinehart

Washington State Medical Association—Sept. 22-25, 1968, Sept. 14-17, 1969, Seattle; Sept. 13-16, 1970, Spokane; Sept. 19-22, 1971, Seattle.

Idaho Medical Association—June 26-29, 1968, Sun Valley.

Medical Society of United States and Mexico.
Sec., James Nauman, Tucson, Ariz.

North Pacific Pediatric Society
Pres., John W. Whitelaw, Vancouver, B.C.
Sec., Leroy O. Carlson, Portland

North Pacific Society of Neur. & Psy.—April 4-6, 1968, Hilton Hotel, Portland, Oregon.
Pres., Henry Zeldewitz, Vancouver, B.C.
Sec., W. W. Thompson, Portland

Northwest Rheumatism Society
Pres., William P. Hauser, Tacoma
Sec., A. C. Jones, Portland

Northwestern Medical Association
Pres., Serge Bryner, Palo Alto, Calif.

Pacific Northwest Radiological Society—
Pres., Norman L. Bline, Portland
Sec., M. Marvin Wallace, Bellevue

OREGON

Ore. Acad. Ophth. & Otolar.—Cosmopolitan Motor Hotel, 4th Tues., Sept.-May
Pres., Walter R. Enders, Oregon City
Sec., Arthur S. Rathkey, McMinnville

Oregon District Branch of American Psychiatric Association (Jan., April, Oct.)
Pres., Norman M. Janzer, Portland
Sec., Peter H. V. Winters, Corvallis

Oregon Pathologists Association—Portland, 2nd Friday (Feb., Apr., Oct., Dec.)
Pres., John L. Lang, Corvallis
Sec., E. W. Landreth, Portland

Oregon Radiological Society — University Club, Portland, 2nd Wednesday October-April
Pres., Arthur L. Ovregaard, Corvallis
Sec., Irving J. Horowitz, Portland

Oregon Society of Internal Medicine
Pres., Robert L. Hare, Portland
Sec., Estill N. Deitz, Portland

Ore. Soc. Obst. & Gynec.—Portland, Heathman, 3rd Fri. (Oct., Nov., Jan. thru May)
Pres., Frederick R. Asbury, Corvallis
Sec., Leroy S. Caspersen, Portland

Oregon State Society of Anesthesiologists—Portland, 3rd Friday (except June, July, Aug.)
Pres., J. A. Siebs, Eugene
Sec., P. E. Schaff, Portland

Oregon Urological Society — Quarterly Meetings, Congress Hotel, Portland
Pres., Donald Beardsley, Portland
Sec., C. A. Macfarlane, Portland

Portland Academy of Hypnosis — 3rd Monday (Sept.-May) Congress Hotel
Pres., Irl Clary, Portland
Sec., David Sellers, Portland

Portland Academy of Pediatrics — 1st Monday
Pres., C. W. Van Rooy, Portland
Sec., Glenn Lembert, Portland

Portland Academy of Psychiatry — Fourth Tuesday except Dec., June, July, Aug.
Pres., Guy Parvaresh, Wilsonville
Sec., Mary Jane Dubinski, Portland

Meetings continued

Portland Surgical Society—4th Tuesday (Sept.-May)
Pres., John Raaf, Portland
Sec., Wm. R. Sweetman, Portland

UOMS Alumni Association — Annual Meeting, April 24-26, 1968, Portland
Pres., I. I. Langley, Portland
Sec., L. H. Smith, Portland

WASHINGTON

King County Acad. Gen. Pract. — 4th Mon., exc. June, July, Aug., Dec.
Pres., Donald McLaughlin, Seattle
Sec., James H. Dahlen, Seattle

Puget Sd. Acad. Ophth. & Oto. — 3rd Tues. (Oct.-May) Seattle, Tacoma, or Everett
Pres., Robert Laughlin, Seattle
Sec., D. F. Milam, Jr., Bellevue

Seattle Gyn. Soc.—3rd Wed. exc. June, July, Aug., Sept., Dec.
Pres., Bernard Gomberg, Seattle
Sec., Joe J. Griffin, Lynnwood

Seattle Pediatric Society — 3rd Friday (Sept.-May), Arctic Club
Pres., James Tucker, Seattle
Sec., Janice Keller, Seattle

Seattle Surg. Soc. — 4th Mon. (Sept.-June)
Pres., Carl Hutchinson, Seattle
Sec., Gilbert G. Eade, Seattle

Spokane Society of Internal Medicine—Quarterly, Ridpath Motor Inn
Pres., Roy C. Biehn, Spokane
Sec., Rex T. Hoffmeister, Spokane

Spokane Surgical Society — Quarterly
Pres., Otto J. Penna., Spokane
Sec., Robert E. Jensen, Spokane

Tacoma Academy of Internal Medicine —4th Tuesday (Sept.-May)
Pres., Marcel Malden, Tacoma
Sec., James D. Lambing, Tacoma

Tacoma Surgical Club — 3rd Tuesday (Sept.-May)
Pres., Edmund Kanar, Tacoma
Sec., Wayne Zimmerman, Tacoma

Washington Academy of Clinical Hypnosis—3rd Friday (Sept.-June)
Pres., L. L. Herr, Seattle
Sec., John E. Nelson, Seattle

Washington Academy of General Practice—Meeting, May 2-3, 1968, Tyee Motor Inn, Olympia
Pres., William Mead, Seattle

Washington State Radiological Society —Quarterly, Seattle
Pres., Owen Martin, Seattle
Sec., D. E. Wold, Seattle

Wash. St. Soc. of Anesthesiologists Quarterly Seattle Annual Meeting
Pres., Richard J. Ward, Seattle
Sec., Philip Bridenbaugh, Seattle

Wash. St. Soc. of Allergy
Pres., Paul Van Arsdel, Jr., Seattle
Sec., S. H. Tarica, Seattle

Yakima Surgical Society—Last Thursday (Sept.-May)
Pres., Frank LeCocq, Yakima
Sec., John Harrington, Yakima

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In
diarrhea of
acute gastroenteritis...

MEN AND MILESTONES IN MEDICINE

100 YEARS OF MEDICAL EDUCATION IN OREGON

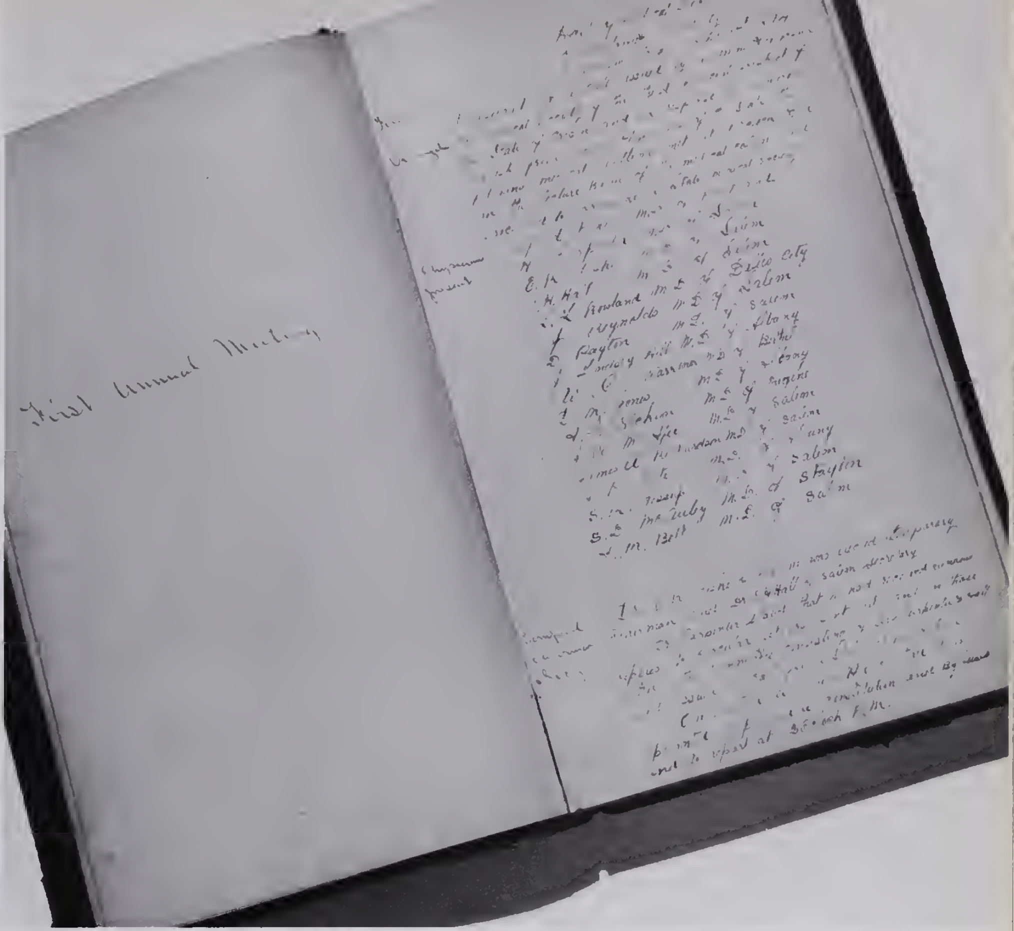
A centennial of medical education is an event worthy of observance anywhere—it is particularly so in Oregon. The first class in formal medical education was held on March 3, 1867, in the newly formed Medical Department of Willamette University in Salem. Only one other medical school in the West has a longer lineage; only thirty-three of the present medical schools in the United States were in existence prior to the one in Oregon.

In our present-day affluence of medical knowledge and medical care, it is difficult to comprehend the almost foolhardy courage that prompted a faculty of eight Salem physicians to start a medical school in a town of twelve hundred people. As the following pages of the history of medical education in Oregon are read we can take deep professional pride in the story.

And as we anticipate with eagerness the responsibilities of the future vistas of medical education, let us pause in this centennial year to pay tribute to those men and events—that compendium of pioneer spirit, personal ambition, professional dedication and constancy of purpose which planted the seed of medical education in a little western village a century ago—and to those who through the years have nurtured and matured it.

E. G. CHUINARD, M. D., Chairman,
Committee on Oregon Medical History
Oregon Medical Association

A Century Of Medical Education In Oregon



When you hear the term "medical educator," what comes to your mind—a professor lecturing to white-coated students—an anatomist demonstrating skeletal components? He is these things.

He is also the obstetrician at a young intern's elbow, guiding him during a difficult birth—the pathologist identifying a puzzling cell formation for a medical technologist—she is a nurse showing her nervous pupil how to move a burned child.

Walk in any hospital, even in the pre-dawn hours and you are apt to see a medical educator at work. He's the one in the rumpled business suit leaning against a wall as he explains to an equally weary resident why the patient needs this or that. You can find clumps of medical educators in cafeterias reviewing, evaluating, illustrating surgical techniques on paper napkins—or on the long hard benches of outpatient clinics teaching students by example, how to reassure a worried family.

The title that precedes his name, where he happens to hang his hat during office hours is not really relevant. What he does is profoundly so. For the term "medical educator," in Oregon or any place, is no more than a label for a member of one of the several professions that are reshaping the future of man.

Basically, history is a record of people, not their structures, their wars, their machines—but their ability, or lack of it, to cope with an environment. And how much of that ability depends on man's physical and mental well being? The degree is incalculable. But this much is certain—the competence of physicians is determined largely by the competence of their instructors. How both have performed since the beginning of medical education in Oregon 100 years ago is a proud page in the State's history.

by thelma wilson

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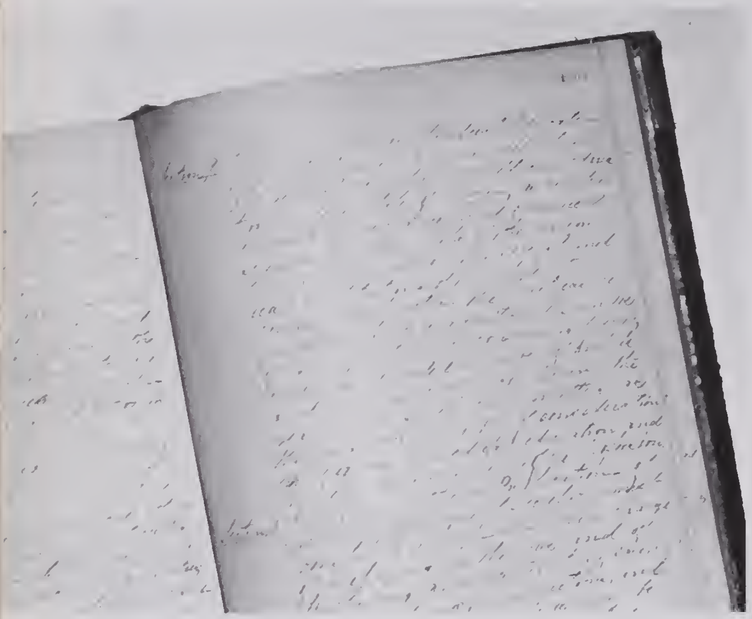
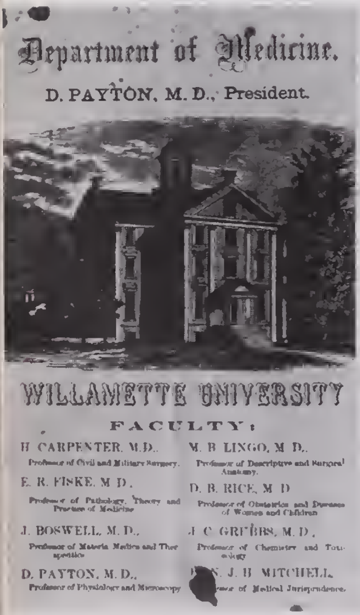
1967



Section 9 on medical education from the original Constitution and Bylaws of the Oregon State Medical Society, adopted September 1, 1874.



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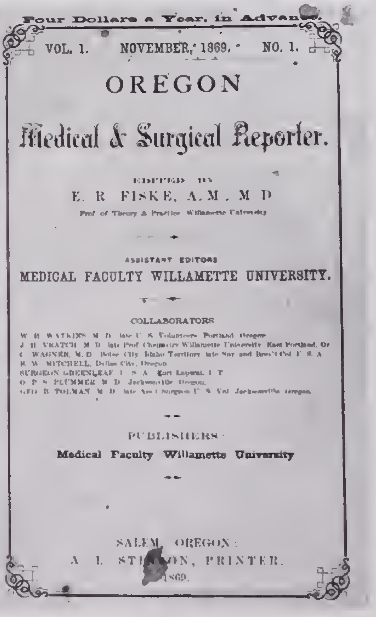

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VOL. 1. NOVEMBER, 1869. NO. 1.

OREGON

Medical & Surgical Reporter.

EDITED BY

E. R. FISKE, A.M., M. D.

Prof. of Theory & Practice, Willamette University

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Medical Faculty Willamette University

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The first medical educator was Dr. Elijah White, a Methodist medical missionary who settled in Champoeg in 1837. His pupil was Dr. William J. Bailey, a graduate of a London Medical School, whose weakness for anything alcoholic landed him in America. He migrated to California, joined a fur trapping expedition and survived a brutal attack by Rogue River Indians to arrive finally in Dr. White's log cabin on the banks of the Willamette River. Here he spent six months as an informal preceptee in the first postgraduate course offered in the State and these candlelight seminars took place on a typical person-to-person basis. After relearning his profession and regaining his self-esteem, Dr. Bailey went on to marry a "good Yankee wife," acquire the "nicest house in the territory" and become a respected and valuable member of the pioneer society.

But such incidents were rare in the frontier wilderness that was Oregon in the early 1800's. In fact, any kind of medical training, formal or informal, was poorly organized during most of the 19th century in America.

Even in medical schools considered the best in the country, requirements for a degree in medicine were unbelievably lax, by today's standards. The candidate served with a physician preceptor for two or three years and had two courses of lectures along with dissection of the human body. After demonstrations in chemistry and physiology and a few other related subjects he had met all requirements and received his degree.

No registration of credentials was required in Oregon until 1889, when the first licensing act was passed, so the educational background of these early physicians is largely unknown. And of course many men who practiced medicine during that period were self-styled "doctors" without even the most rudimentary knowledge of medicine.

Surgery was considered a last, and generally futile, resort and there is no evidence that ether was used in Oregon then, although it had been discovered some years before.

The first major influx of physicians occurred in the early 1840's when doctors, with and without diplomas, joined the long lines of wagon trains carrying gold seekers to the West. But they were preceded, in 1836, by medical missionary Dr. Marcus Whitman, the first American-trained physician to practice in the Northwest.

In the 12 years before he, his wife and twelve others were massacred by Cayuse Indians, Dr. Whitman's selfless devotion to his patients, Indian and white, placed him among the truly great men of this era.

Some of the immigrating doctors settled in the Willamette Valley and Southern Oregon, to become the founders of medical education in Oregon. Many established land claims and combined medical practice with farming. Others taught school or worked in other more or less professional areas and only a few limited their work to medicine.

Early records show only 115 physicians living west of the Cascade Mountains and at The Dalles in 1860-1863, with a few others among the gold miners in the John Day and Jacksonville regions and in Baker County, who remained in Oregon following the Civil War.

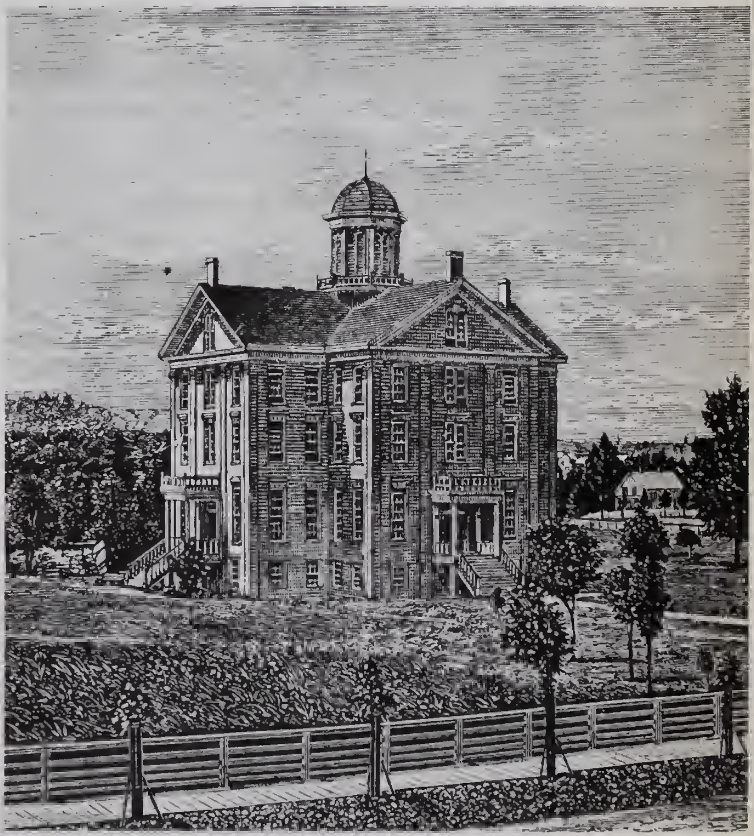
Even if the pioneers survived the cholera-ridden wagon trains to settle their land, the population was so scattered that epidemics were practically unknown until well into the 1860's.

But as the immigrants continued to pour over the mountains they brought scarlet fever, smallpox, measles, whooping cough, typhoid, other contagious diseases, and before long care of the insane became a public problem.

By 1865 a problem familiar today became painfully evident. There were not enough reasonably well-trained physicians to meet the needs of a rapidly increasing population. So Governor A. C. Gibbs and a group of physicians asked the Board of Trustees at Willamette University in Salem to establish a medical department in Portland, the largest town. In February, 1865, the Board established the "Oregon Medical College" and six men were appointed to the faculty. Temporary offices were set up at what is now 205 Washington Street, but the fledgling medical department never materialized. Not one student was given instruction.

Credit for the next step goes to Dr. J. H. Wythe, president of Willamette University who decided his school should try again in Salem. He was a physician as well as a clergyman, had practiced medicine in Pennsylvania and had been a member of the Medical Corps of the Northern Army during the War of Rebellion. At Dr. Wythe's suggestion, a committee of three was named by the Willamette Board of Trustees to

Willamette University, 1867 — home of Oregon's first medical school.



Good Samaritan Hospital, completed in 1875, faced SW Lovejoy between 22nd and 23rd streets. The University of Oregon Medical School's first location was in a pasture behind this building and was shared with three cows.

discuss the inactive medical department in Portland.

After the customary number of meetings, maneuverings, and whereas'es the proposal was adopted in November, 1866, and the first faculty to give medical instruction in the Northwest was elected. They were Salem physicians Horace Carpenter, E. R. Fiske, John Boswell, J. H. Wythe, D. E. Payton, J. W. McAfee, A. W. Sharples, W. C. Warriner and the Honorable J. S. Smith, professor of medical jurisprudence

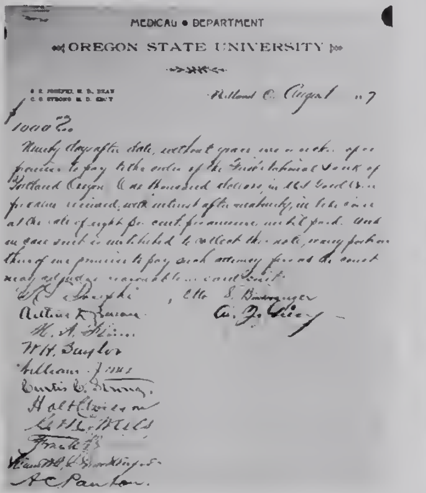
Since one building comprised the entire university at that time and there were only about 7,000 people in Marion County, facilities for training physicians must have been less than lavish. Comparison with other medical schools in the country shows that the infant department at Salem was on a par with most of them.

The first course of lectures began March 3, 1867, and at commencement the same year W. A. Cusick, D. M. Jones and J. L. Martin received degrees in medicine. The second term which began the following November continued for 20 weeks and required attendance at two courses of lectures for graduation.

The Willamette Medical Department was the third of its kind west of the Mississippi and the first western medical school north of San Francisco. For the first time promising young men in the Northwest had an opportunity to study medicine. Before the Salem department opened, only wealthy families could send their sons to Eastern schools, provided the boys were hardy, and foolhardy enough to attempt the journey.

The press was kind to the new school. The Salem *Daily Record* of June 14, 1867, read "The medical department of the University went into operation early in the spring with 24 students, which is considered a very favorable commencement. To give opportunity for clinical instruction this their first season the faculty have offered to perform any needed surgical operations free of compensation when the parties are unable to render it."

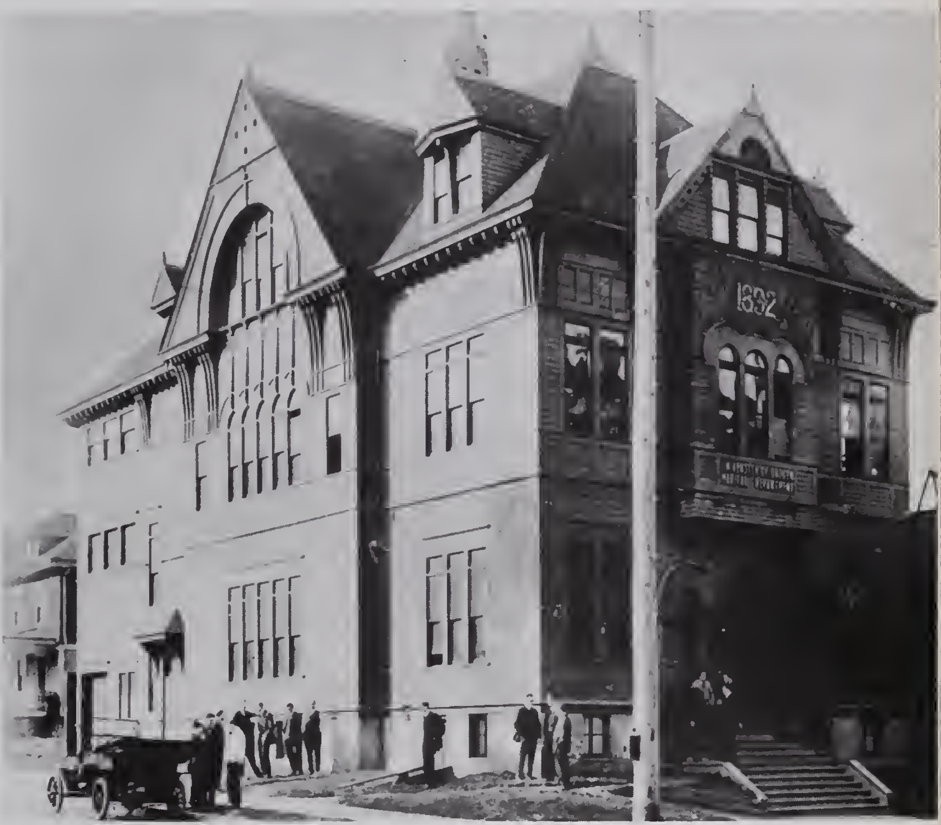
The faculty's ambition to develop a "first class school" was in keeping with the missionary motives which founded Willamette in 1842, but their purpose was in no way as difficult as it would be today. Laboratories were practically unknown and elaborate clinics and dispensaries found in European medical centers were as foreign as the Sphinx. The requirements were sim-



MEDICAL • DEPARTMENT

OREGON STATE UNIVERSITY

Original promissory note for $1,000 that launched the University of Oregon Medical School in 1887.



University of Oregon Medical School's second building at NW 23rd and Lovejoy streets.

ple: some chairs and possibly a blackboard for the lecture room and any kind of enclosed space where a few cadavers could be dissected.

Although equipment was no particular problem, people soon were.

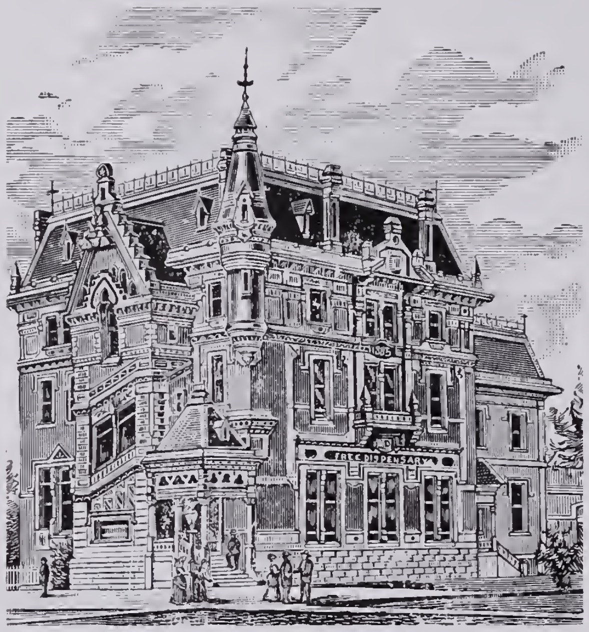
There is something in the nature of most physicians that makes them extremely independent creatures, inclined to shy away from controls. Because there was no firm administrative policy established between Willamette and the medical faculty, the physicians preferred to govern themselves without bothering to consult the Board of Trustees. And they did. The doctors also found many areas of disagreement within their own ranks.

As a result the Board, incensed at their recalcitrant "baby," presented a resolution in August of 1868 to discontinue the medical department. The proposal was tabled, but the first rift in the relationship had been formalized.

In all fairness, however, it should be pointed out that the majority of the medical faculty were poorly fitted by training to be instructors, but at the time Willamette officials had little choice but to take the few available men in the area, with or without diplomas. Dr. Wythe was probably the only one who had ever been on a medical staff before. He was a graduate of Philadelphia Medical College and was probably the best surgeon in the newly organized faculty, but he was appointed professor of physiology and hygiene while Dr. Carpenter became professor of surgery.

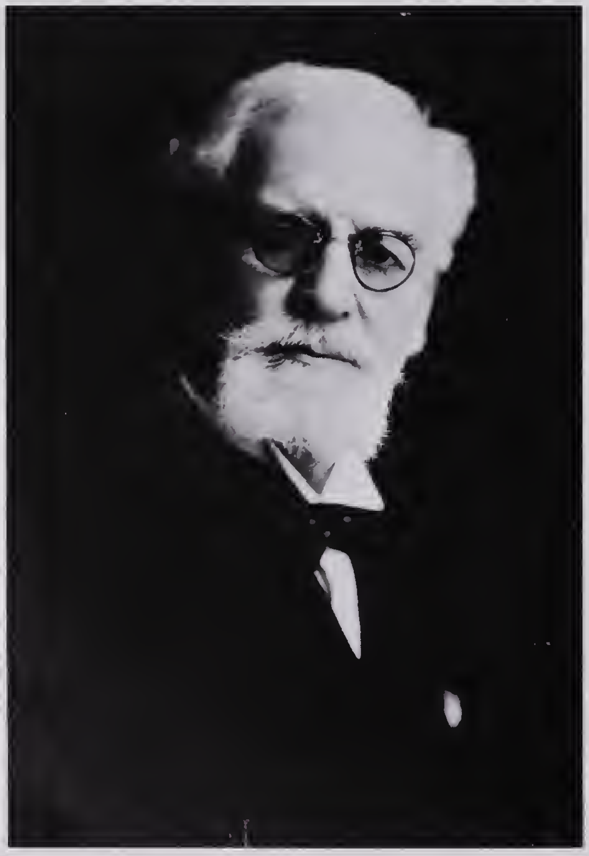
Now trouble was as certain as sunrise, and it came. The faculty was reorganized, but Dr. Carpenter was soon reinstated. President Wythe lost the battle, was "regularly tried, found guilty of charges preferred against him and expelled from the medical faculty by his own vote." Although the trustees disapproved the action and censored the physicians for their presumption, this was small comfort to Dr. Wythe. He left Salem to become pastor of the Taylor Street Methodist Church in Portland.

Dr. Carpenter, now dean, didn't appear to have much of a knack for administration for the faculty grumbled and growled, charged and counter-charged until he resigned in 1875. But Dr. Carpenter did manage to have the last word—literally. This rugged individualist kept the department's books and records. Much that would be of historical value was lost.



Willamette University College of Medicine at 15th and SW Couch streets, Portland—1885.

Dr. Simeon E. Josephi, first dean of the Medical School from 1887 to 1912.



In spite of the controversies, the school continued to operate and in 1876, 23 students were registered. Perhaps the difficulties of giving medical instruction in Salem increased. More than likely it was continued dissension that prompted the Board of Trustees to draw a sigh of relief and unanimously approve a medical faculty recommendation to remove the department to Portland. A new faculty was named, including several men who had been with the Salem Medical Department.

The first faculty meeting in Portland was held on June 18, 1878, when a housing committee was appointed. They rented some rooms above a livery stable on the corner of Southwest Park and Jefferson streets, the first Portland home of the Willamette University Medical Department. Faculty members at this first meeting were Drs. J. A. Richardson, A. Sharples, W. H. Watkins, R. G. Rex, W. H. Saylor, O. P. S. Plummer, dean; R. Glisan and L. L. Rowland. The first formal instruction took place the following December when the Portland population of 19,128 people certainly offered greater clinical facilities than Salem.

There was still another factor which influenced the move, the organization four years earlier of the Oregon State Medical Society on September 1, 1874. At their first meeting a committee on medical education was appointed to prepare an annual report on the general condition of medical education in Oregon compared with other states. Committee members Drs. F. A. Bailey, H. W. Ross and H. J. Boughton were asked also to report on the medical institutions in Oregon, instruction offered, requirements for graduation, methods of examination and the number of pupils and graduates at each commencement.

Formation of the Society gave physicians in the State a means to express their interest in medical education. In fact, at the Society's fifth annual meeting in 1878 the presidential address by Dr. L. L. Rowland was titled "Medical Education," and a special committee was appointed to attempt an examination of the medical department of Willamette University.

Another incident that raised the specter of competition probably had some bearing on transferring the school to Portland. It was the organization in 1877 of the Oregon Medical College in Portland. This attempt, entirely independent of Willamette University, was stillborn in spite of local support.

But the end result was beneficial. After a series of conferences, the nine-member faculty of the proposed medical college was absorbed by the Willamette Medical Department, thus strengthening the faculty and at the same time eliminating the formation of a rival school in a thinly populated state.

But this arrangement had a few dissenters, among them our old friend Dr. Carpenter. In his presidential address to the State Medical Society in 1879 he recommended, "that this society do organize and establish under the incorporation laws of the State of Oregon a State institution to be called the Oregon Medical College with a faculty of eight professors. . . ."

This was the first known suggestion to place medical education under the jurisdiction of the state. However, Dr. Carpenter did not suggest control of the proposed Oregon Medical College by the State University which had opened its doors at Eugene in 1876. Rather he proposed having the State Medical Society assume responsibility without supervision by lay boards of control which he had found so onerous at Salem.

Two significant proposals were made at the Society's meeting in 1880: that a medical journal be published by the medical society and that the society prepare a proposal stressing the importance of "a high standard of graduation and that higher preliminary attainment be acquired of all applications for admission." The first recommendation bogged down in committee red tape but the last was adopted unanimously.

At the same 1880 meeting Dr. E. P. Fraser presented two bills for submission to the State Legislature. One was "an act to regulate the practice of medicine and surgery in the State of Oregon" and the second "an act to establish a state board of health." Both were approved by the Medical Society which five years later also approved a bill to "establish a state board of medical examiners and licensors and to define the duties and powers of such a board."

These incidents are characteristic of the society's recognition of the responsibility physicians hold to their communities and state. For the past 87 years their interest in medical education has been a powerful force in elevating the standards of the profession in the Northwest. Certainly their concern was justified as a glimpse at the standards of medical practice during that period will show.

A report in 1879 by a state medical society committee reads, "In this connection we take occasion to protest against the prostitution of the title M.D. so commonly practiced. . . . The right to be called 'doctor' is possessed only by those who have that degree legally conferred upon them. . . . The ignorant pretenders who brazenly put 'M.D.' to their names to spell 'sody,' 'sweat oil,' and 'blew mas' in their prescriptions, who cannot tell mumps from erysipelas . . . such pretenders we say do us but little injury for their ignorance is so apparent that the public is not long in perceiving it. . . ."

In 1879 a man who was to play a vital role in medical education in Oregon joined the Willamette Medical faculty as lecturer on diseases of the mind. He was Dr. Simeon E. Josephi, a graduate of Toland Medical School in San Francisco, who had located in east Portland and was connected with the insane asylum, headed by Dr. J. C. Hawthorne. In 1880 when Willamette was admitted to membership in the Association of American Medical Colleges Dr. Josephi was also given the chair of anatomy.

First State Board of Medical Examiners, 1889.

Inevitably the school outgrew its quarters above the livery stable and in 1885 a new structure was built at 14th and Couch Street in what was then the heart of the city. Behind its Victorian embellishments it contained a 150-seat auditorium, a dissecting room with 20 tables and a new refrigerator large enough to store 30 bodies for dissecting material. This building housed the school until the move back to Salem in 1895.

Progress in medical education was slow, as it was across the country, until Johns Hopkins University School of Medicine opened in 1893. This was the first school in America to require a Bachelor's degree for admission.

But in a brief 20 years Oregon's wilderness physicians had pushed and prodded, fought and labored, defied Indians, epidemics, and ignorance, to establish and support a medical school with standards comparable to many in the far older eastern cities.

In 1883 attendance requirements were moved up from two to three courses of lectures to qualify a student for medical examinations. At that time, first year students were required to study anatomy, physiology and chemistry and attend lectures in the other subjects. To the second year requirements the faculty added materia medica, therapeutics, theory and practice of medicine, surgery, obstetrics, diseases of women and children and all the special branches.

Clinics were held in all the "practical branches" and at the end of the second year final examinations were given in anatomy, physiology and chemistry, but attendance at lectures in these subjects was still required during the third year. The last year included surgery, theory and practice of medicine, materia medica and therapeutics, obstetrics and gynecology and special branches together with the clinics. This change marked the beginning of a graded curriculum such as was established at Northwestern University Medical School, then the Chicago Medical College, in 1878.

Probably the most important event of the following year was the election to the faculty of Dr. K. A. J. Mackenzie, as a lecturer in anatomy, who would become one of medicine's giants in Oregon.

Willamette University College of Medicine in Salem—1905.

Dr. Kenneth A. J. Mackenzie, second dean from 1912 to 1920.

During the next 12 years two events occurred which were to affect the progress of medical education in Oregon. One was moving the Willamette Medical Department back to Salem in 1895. The immediate cause, according to the Willamette Board of Trustees' minutes of October 7, 1895, was the "sudden withdrawal of all hospital facilities" in Portland. This apparently referred to the old Methodist Hospital at East 30th and Stark streets that was closed down after scathing attacks against it in the local papers.

Lacking other facilities, the medical faculty appealed to the Board of Trustees for aid. Appalled at wasting 17 years of effort, they bustled about to provide more or less temporary quarters, for the uprooted medical department, at Salem, where the school reopened and functioned until a new brick building was erected for medical instruction on the Willamette campus in 1905.

It was described in the Willamette University catalog of 1908 as "new and modern in every detail" but this statement apparently employed some literary license. The dissecting room was located in an unfinished top floor of the building in a bare area with exposed rafters and studding. Some tables for cadavers were provided, but there was no modern equipment for an anatomic laboratory. The medical department occupied this building until 1913 when it was discontinued by a merger with the University of Oregon Medical School.

The second and more significant event illustrates again the independence of spirit which is characteristic of physicians. Even a brief look at their history reveals incident after incident when doctors gambled their professional futures rather than sacrifice personal convictions. And there is no better example of this independence than in the events that split the Willamette Medical Department and led to the formation of the University of Oregon Medical School.

The trouble began over a new appointment to the chair of obstetrics. At a faculty meeting on April 8, 1887, a motion was made by Dr. A. D. Bevan, professor of anatomy, that "gave rise to a protracted and acrimonious discussion

First Multnomah County Hospital between First and Second and SW Hooker and Wood streets.

Part of the 1912 Medical School Library, located in the old physiology laboratory (23rd and Lovejoy streets).

during which much personal bitterness was manifested and an apparently irreparable breach created in the faculty." When the meeting was over the entire faculty had resigned and the recording secretary was instructed to strike out most of the minutes.

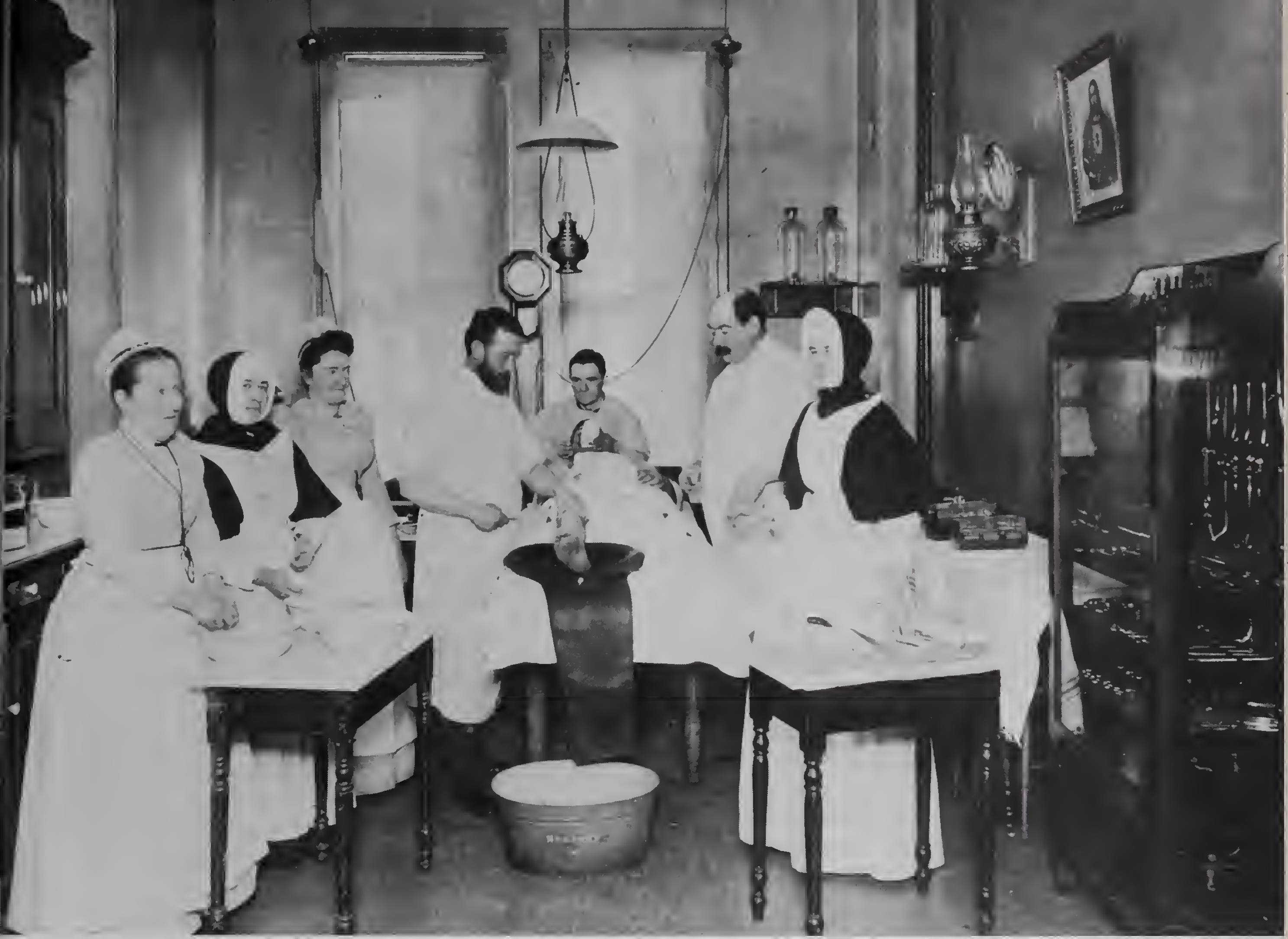
Even after tempers cooled four men remained adamant, and a month later a letter to Willamette's acting dean made their resignations official. The dissenters were Drs. K. A. J. Mackenzie, H. C. Wilson, George M. Welles, and S. E. Josephi. They were joined by several other local practitioners and together set about organizing a rival school.

One of the most active men in the project was Dr. C. C. Strong, a brother-in-law of Judge M. C. Deady who was then president of the Board of Regents of the State University. The judge's interest in the new venture may have had some influence on the Regents, who granted a charter in the name of the University of Oregon Medical School.

At a June meeting in 1887, four other physicians joined the first four rebels to be named professors in the original charter. They were Drs. A. C. Panton, Arthur D. Bevan, Otto Binswanger and Curtis C. Strong. The charter specified that "the course of study in said school of medicine preparatory to graduation therefrom shall embrace two years."

Dr. Josephi was elected dean and instruction began in the fall of 1887 in a former grocery store which was moved to a sliver of land on the Good Samaritan Hospital Grounds at what is now 23rd and Marshall streets. The building contained a lecture room on the ground floor and a dissecting room above. Cadavers were hauled up through a trap door in the floor with a block and tackle.

The venture was financed by a $1,000 loan from the First National Bank of Portland, on a joint note signed by the faculty members. When Marshall Street was extended in 1889, the little building was moved to 23rd and Lovejoy streets. Then it was moved again in 1893 to make room for the "sightly, compact and well-equipped medical college building" erected that year. Being close to both Good Samaritan and St. Vincent Hospitals, surgical and medical patients were available for observation under treatment and the new structure served the school well until 1919. Then it burned, as equipment was being moved to the present Medical Science building on Marquam Hill.



Early day surgery at St. Vincent's Hospital, 12th and Marshall streets.

The fire did have certain benefits. It provided a handy way to dispose of some horrible pink-striped lab coats Dr. William (Pop) Allen had bought. During the excitement a young lab assistant rushed heroically into the burning building, grabbed all the coats and threw them into the flames. Rumor persists that he was awarded a medal for valor.

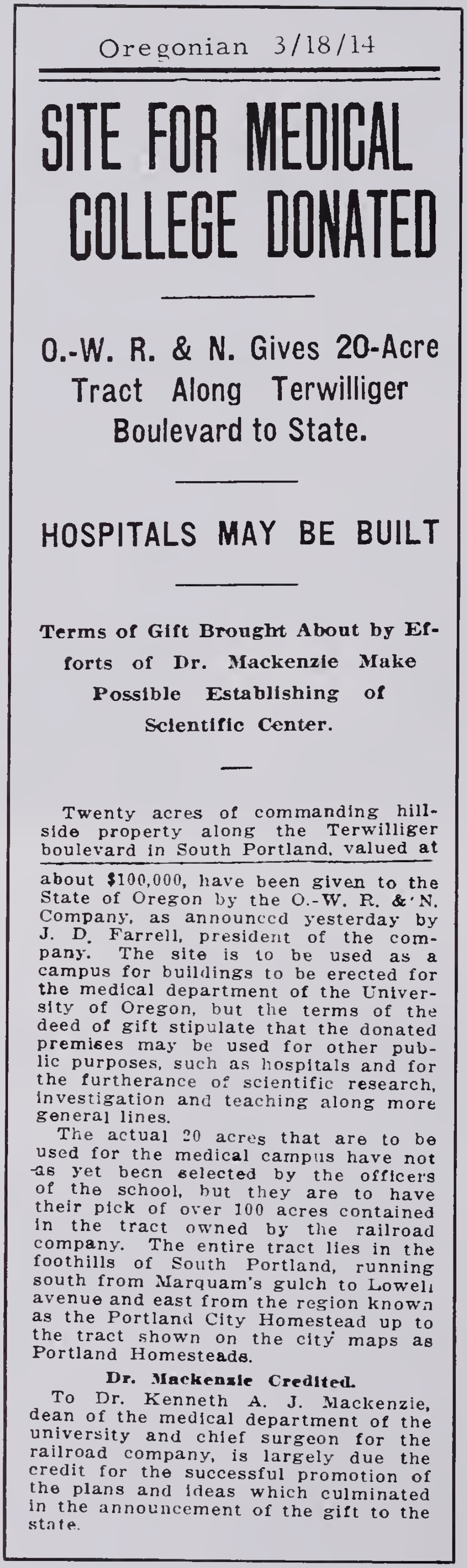
The location of the fire also expedited a settlement for insurance payments. A still smouldering dissection room is enough to discourage the snoopiest of investigators. And it did. After one whiff they retreated to do their estimates at some distance.

The poor fellow who lived next door wasn't as lucky. Dr. Robert Benson tried to save his pathological specimens by throwing them out the window to students standing below. Between poor pitching and bad catching most of the collection landed in the neighbor's vegetable garden. He spent the next month picking tumor specimens out of his potato patch.

The first admission requirements were "satisfactory evidence of knowledge of the common English branches including reading, writing, spelling, grammar, geography, arithmetic and so forth." A minimum of three years was required for graduation.

Although some time had been given to teaching microscopy, histology and physiology, the first actual laboratory course in bacteriology was given in 1892 by Dr. A. E. Mackay, who proudly displayed the first tuberculosis bacillus seen under a microscope in the Pacific Northwest. By 1898, when the School adopted the requirements of the American Association of Medical Colleges, the course has been lengthened to four years and studies were being graded.

"Progress flourished anew" said the late Dr. Laurence Selling. "The School now had the use of Dr. Mackay's microscope, the only oil emersion lens in the Northwest. He not only treated students, but also physicians, to their first look at germs.



Oregonian 3/18/14

SITE FOR MEDICAL COLLEGE DONATED

O.-W. R. & N. Gives 20-Acre Tract Along Terwilliger Boulevard to State.

HOSPITALS MAY BE BUILT

Terms of Gift Brought About by Efforts of Dr. Mackenzie Make Possible Establishing of Scientific Center.

Twenty acres of commanding hillside property along the Terwilliger boulevard in South Portland, valued at about $100,000, have been given to the State of Oregon by the O.-W. R. & N. Company, as announced yesterday by J. D. Farrell, president of the company. The site is to be used as a campus for buildings to be erected for the medical department of the University of Oregon, but the terms of the deed of gift stipulate that the donated premises may be used for other public purposes, such as hospitals and for the furtherance of scientific research, investigation and teaching along more general lines.

The actual 20 acres that are to be used for the medical campus have not as yet been selected by the officers of the school, but they are to have their pick of over 100 acres contained in the tract owned by the railroad company. The entire tract lies in the foothills of South Portland, running south from Marquam's gulch to Lowell avenue and east from the region known as the Portland City Homestead up to the tract shown on the city maps as Portland Homesteads.

Dr. Mackenzie Credited.

To Dr. Kenneth A. J. Mackenzie, dean of the medical department of the university and chief surgeon for the railroad company, is largely due the credit for the successful promotion of the plans and ideas which culminated in the announcement of the gift to the state.

"The lecture room was located on the main floor and there were cuspidors scattered around through it, since so many of the boys chewed tobacco. The anatomy lab was located on the second floor where there was a side door which was the one most used. In the summer time it was as natural as breathing when coming out to look up to see if the water bag was coming down. In fact, during the summer session, the sidewalk was kept wet with this favorite pastime. The winter season didn't dampen the spirit much either."

But the days of lighthearted antics were running out, and soon, for too many graduates were being failed by the State Board of Medical Examiners. Both the School and faculty were under attack by the press and the situation became so acute that it was taken up by medical societies and local journals.

The *Medical Sentinel* commented "Either the medical colleges of Oregon ought to improve or disband or else there should be a change on the State Examining Board by the removal of one or more members."

At the 1908 examinations, five out of the eight graduates who appeared failed to receive a license to practice. Apparently much of the difficulty could be laid to the different standards held by members of the State Board. At a meeting of the Marion County Medical Society in 1908 Dr. W. Carleton Smith said, "The examination in May, 1907, in nervous and mental diseases was conducted by an examiner who had failed eleven applicants previously. The average of the four who failed was 52 per cent in this subject. When those same men repeated the examination in January, 1908, and were tested by another board member the average for the four was 86.5 per cent."

Apparently some officials, with the best of intentions, were attempting to meet the pace set by the American Association of Medical Colleges and the American Medical Association—a pace so fast that the faculty found it almost impossible to follow at that time. Smarting under criticism at home and from the AAMC they voted in November, 1907, to resign from the Association, rather than be ousted.

But the School's troubles were just beginning, for in 1910 it was the object of a bitter denunciation in the famous report of Abraham Flexner on Medical Education in the United States. For a time it appeared the institution would go under as many others had. In 1906 there were 161 medical schools in the country, but not more than 80 had any stature, according to the American Medical Association report by the Council on Medical Education and Hospitals.

Demands for equipment and salaries for full-time instructors in at least the laboratory subjects soon weeded out many of the weaker schools and before long only 135 remained. Of these, 29 were rated as Class B and 72 as Class A. The University of Oregon Medical Department rated an A.

The *Medical Sentinel* rejoiced: "It places the Oregon School in the same classification as the big medical schools in the East."

Lacking financial support, the affairs of the Portland school became more and more tangled because of insistent demands for higher standards. At this time the budget from the State's general fund was $1,000 annually. Money was needed for equipment, for full-time instructors, for all purposes, so the faculty appealed to the University Board of Regents. As a result the appropriation increased to $2,500 yearly and the Board president recommended increasing this amount to at least $10,000 annually, so the School could meet the requirements for continued recognition by the standard-setting authorities.

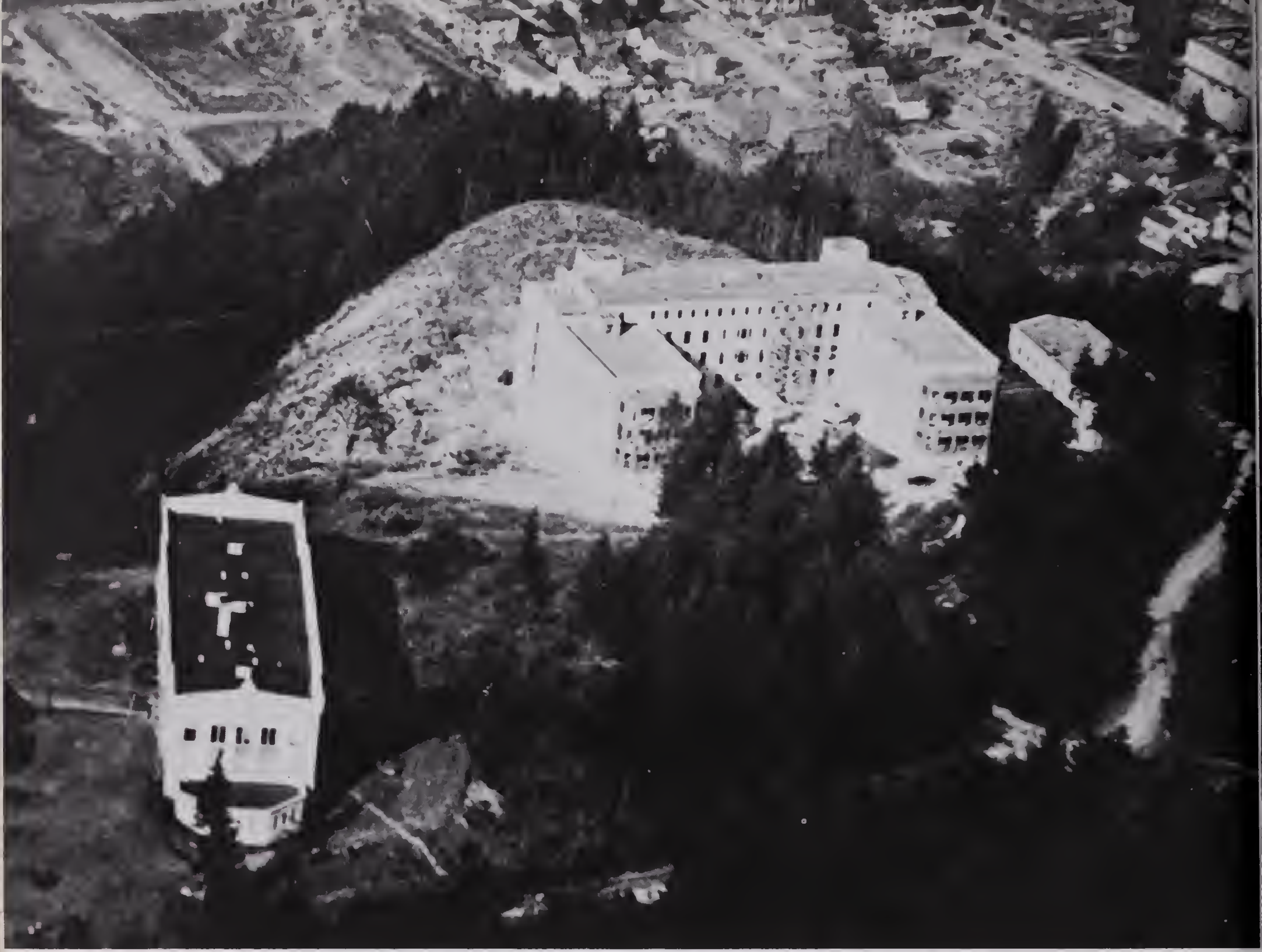
At its next session the legislature came to the rescue with an appropriation of $30,000 for the 1911-1912 biennium. Bolstered by the promise of more support, the faculty took another forward step, the appointment of Dr. David N. Roberg as the first full-time instructor at the School. He became professor of anatomy in 1910 and Dr. J. D. MacLaren was made professor of physiology the following year.

By 1913 six salaried instructors had been added to the staff including Drs. F. C. McLean and R. B. Dillehunt. Higher standards brought increased need for better hospital and dispensary facilities for the students and in 1909 preliminary arrangements were made to use the County Hospital for teaching purposes.

Before that, two attempts to maintain a dispensary in downtown Portland had been ineffectual, but the People's Institute at Fourth and Burnside Streets was more successful. In 1908 a clothes closet on the second floor of these rooms was the original dispensary. The janitor made a table and with money raised by the Mothers Club of the People's Institute a few instruments and supplies were purchased.

By 1910 the Institute was serving between 15 and 25 patients each day. Recognizing the advantage of an affiliation with the Institute, the medical faculty agreed to pay the dispensary attendant $25 a month, thus obtaining the first

Peoples Free Dispensary at Fourth and Jefferson streets, 1915.



A 1920 view of the first unit of the Medical School and Multnomah Hospital (under construction) on right.

workable outpatient facilities for the School. Gift funds from Jacob Kamm and members of the Arlington Club helped underwrite the dispensary, and by 1916 better quarters at Fourth and Jefferson streets were obtained.

After guiding the school through its first critical 25 years Dean Josephi resigned in 1912 to be succeeded by Dr. K. A. J. Mackenzie. The following year the Willamette Medical Department in Salem was consolidated with the Portland school.

The Salem school had struggled valiantly for eight years, but the limited funds of a private university and meager clinical facilities of the small town made the merger inevitable.

In June of the same year another powerful ally of medical education was born. The University of Oregon Medical School Alumni Association was organized for graduates of both schools.

The School had survived a perilous childhood and adolescence, and in doing so had outgrown the frame building on 23rd and Lovejoy Streets. With each class pressure increased for larger labs, better equipment, and modern instruction.

No one was more aware of the need than Dean Mackenzie. Fortunately, he had been chief surgeon for the Oregon Railway and Navigation Company and knew members of the Board of Directors well. Some years before, the Company had bought twenty acres, sight unseen, for a roundhouse. A more unlikely site is hard to imagine: it was perched a mile and half above the city on an inaccessible hilltop.

But Dean Mackenzie saw the location through different eyes. He envisioned a medical center far above the city's noise and grime and he lived to see the beginning of his dream become a reality. He persuaded the railroad officials to donate the original 20 acres atop Marquam Hill for the School and from that day he worked unceasingly to develop "Mackenzie's Folly" as

Dr. Howard (Bunny) Haskins with his students in the UOMS Physnological Chemistry Laboratory

some called it. The gift of a new campus in 1914 was followed the next year by a legislative appropriation of $50,000 for a new building.

But there was a joker in the deck. The solons stipulated that $25,000 was to be raised privately. This was not easy. Many businessmen and practitioners considered the site impractical and did not hesitate to say so.

Finally the matter was threshed out and solved at a Chamber of Commerce dinner meeting. During the heated debate, Julius Meier had been moving quietly about talking to members. He waited for a lull, then stood up and calmly announced that the required amount had been guaranteed. The cornerstone of the first unit, the Medical Science building, was laid on May 1, 1918, and the three story building completed the following year.

The second unit, then called Mackenzie Hall, was erected in 1921 with legislative funds of $113,000 and a similar amount from the General Education Board of New York, a Rockefeller-endowed foundation. Although the new building was four stories high and had twice the capacity of the first unit, total enrollment had to be restricted to a maximum of 60 students.

In the meantime the need for a new County Hospital had become urgent. Knowing clinical facilities adjacent to the School would be valuable to the students, Dean Mackenzie offered the Multnomah County commissioners nine acres for a County Hospital and a nurses' dormitory. His offer was accepted and construction of Multnomah Hospital was well underway in 1920 when the Dean was fatally stricken with angina pectoris. But in eight years he had established the Medical School in a permanent and eminently desirable location and had joined the fundamental elements of patient care and teaching into a new era of medical education and research in Oregon.

During the School's formative years and those that were to follow, the honor roll of men who aided medical education in Oregon grows impossibly long to recount. Physicians like Harold Myers, Howard Haskins, William Allen, Frank Menne, Harry Sears, Ralph Fenton, Nobel Wiley Jones, T. Homer Coffin, Albert Mackay, John Dickson, Joseph (Bill) Bilderback, Eugene and Paul Rockey, Robert Yenney, Laurence Selling, Thomas Joyce, Frederick Kiehle, Lyle Kingery, J. Guy Strohm and many more like them were the backbone of the School. Had they not served there would be no University of Oregon Medical School today.

For the teaching of medicine is, possibly more than any other science, a living thing, translated in spirit and purpose from the practitioner to the student—and it would be hard to find one man on the School faculty who did not give up a great deal in order to teach.

High on this illustrious roster is the name of Richard B. Dillehunt, third dean of the Medical School and Chief Surgeon of the Shriners' Hospital for Crippled Children for 19 years. Although he had been assistant dean a major share of the time since 1912, his election took place only after an intensive battle between two factions of the faculty. The majority of the older clinical members considered the laboratory sciences as merely a necessary adjunct for training physicians. The younger clinical men and the laboratory staff believed equally strongly that medical education must be primarily a science. Dean Dillehunt was destined to walk a tightrope between the two factions until each recognized the importance of the other's role.

Dr. Richard B. Dillehunt, third dean from 1920 to 1943.

Dr. David W. E. Baird, present dean, 1943—.

"Dilly," as he was affectionately known, was a man of enthusiasm, ability, and persuasive charm that he could employ at will. And he used his attributes whether on Marquam Hill or in the halls of the Legislature to spearhead the School's rapid growth during the next 23 years.

In 1921, operation of the Portland Free Dispensary was reorganized, providing the Medical School with more reliable outpatient clinical facilities, but the dispensary was far from ideal.

In Dr. Warren Hunter's presidential address at the Portland Academy of Medicine's annual meeting in 1941 he said, "At that time the Southern Pacific's red electric trains ran out Fourth and rounded that particular corner with a clanking and screeching of wheels which made it difficult to hear well and certainly produced some adventitious pulmonary and cardiac sounds if one should chance to be using a stethoscope. . . . the place was small and always crowded. In the farthest and darkest corner a fluoroscope and x-ray machine were placed . . . a new entrance for those with venereal diseases was made on Fourth. Dermatologic patients were seen here and in these quarters a young man named Lyle Kingery gave the first formal lecture on dermatology.

"It was in the patients' waiting room that the first clinical pathologic conferences or as they were termed then, autopsy clinics, were started by Dr. Robert L. Benson. . . .

"Days, sometimes even an entire week would go by without an autopsy during the first year, when I doubled as a student assistant and a stenographer for the pathology department. Then in 1921 came the contractual relationship between the county commissioners and the Medical School whereby all coroner's autopsies were performed by the professors of pathology who were designated as corner's physicians."

Dr. Hunter went on to recall the quality of postgraduate clinical training at that time. He said, "In 1920 the Board of Medical Examiners of this State did not require evidence of candidates having contracted to serve a year's internship in an approved hospital. Furthermore only a few such internships were then available locally.

"Residencies as we now define them were unheard of. Scarcely any of the specialty boards were then in existence in the United States. A graduate could go directly into clinical practice after passing the state board examination, if he so desired, and some did so. Others took such internships as were available while others became assistants to older physicians. By 1923, the Board of Medical Examiners began to require evidence of an intention to serve a minimum of one year before a license was granted. Approved residencies in the modern sense, lagged by several years."

In 1924 the campus was enlarged by a gift of 88 acres of adjacent land from the Jackson family, publishers of the *Oregon Journal.* The tract provided room for future construction and 25 acres of it were deeded to the United States Government in 1926 as a site for a veterans hospital.

The School now entered a period of consistent

The 1924 campus bus hauled students and supplies from downtown Portland.

growth. In 1926 Doernbecher Memorial Hospital for Children was completed, providing 70 beds for sick and disabled youngsters committed to the Medical School by Oregon counties under the Children's Hospital Service Law. In memory of their father, S. S. Doernbecher, his children gave $200,000 for construction of the building and another $120,000 was donated by local citizens.

In 1931, $400,000 from the General Education Board of New York provided the Medical School with a modern Outpatient Clinic on the campus. In 1939 the University State Tuberculosis Hospital was completed with state and federal funds as well as gifts from the family of former Governor Julius L. Meier.

During the same year the Medical School Library and Auditorium were completed with a gift of $100,000 from Dr. John E. Weeks, a like amount from the Rockefeller Foundation and a grant of $163,500 from federal funds.

The handsome structure was the realization of a long-cherished dream for Medical Librarian, Miss Bertha Hallam. This "mighty mite" who arranged the School's first collection of books in an elevator shaft back in 1919 has prodded the Library's growth with an indomitable determination up to and even beyond her retirement in 1965.

The Library is now a major source of postgraduate education for physicians. Throughout the years books, periodicals, historical items, and gift funds, have arrived in a steady stream and to this day donations from the medical societies are given annually. In 1933 almost 2,000 volumes from the collection of Dr. Ernst A. Sommer, founder of the Sommer Memorial Lectures, was added to the collection which now exceeds 100,000 books.

But a history of the Library would be incomplete without acknowledging the important contributions made to it and to medical educaion by the periodicals and journals.

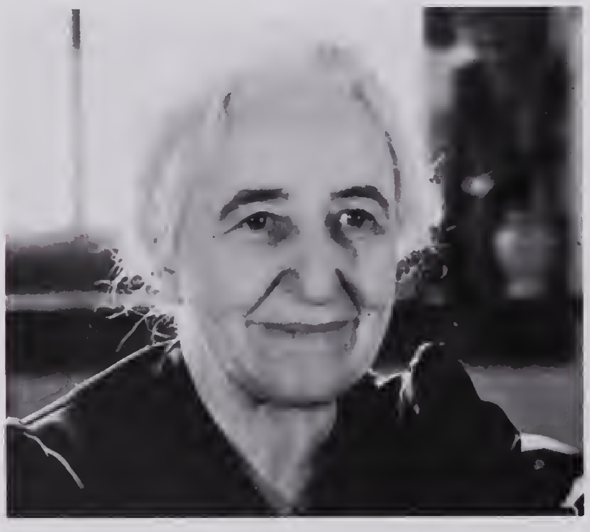
The first published in the Pacific Northwest was in 1866, the *Oregon Physio-Medical Journal,* edited by Dr. J. C. Shelton of Salem.

The *Oregon Medical and Surgical Reporter* was published in 1869-70 by the Willamette Medical School faculty. It was a solid effort by the better-trained and more progressive men to elevate standards of medical training and practice, but there were too few doctors in the Pacific Northwest to support a regular publication at that time.

Actually the *Proceedings of the Oregon State Medical Society* provided the most reliable substitute for a medical journal for many years. From the time the Society was formed in 1874 until 1893, when the *Medical Sentinel* began in Portland, the Medical Society's *Proceedings* or *Transactions,* as they were sometimes called, represented the only permanent printed record of medical activity in the state. The *Sentinel* reported the Society's actions until 1910 when *Northwest Medicine,* which had been published in Seattle since 1903, became the official organ of the Society. As medical practice splintered into various specialties, journals for the specific areas developed, but in the meantime *Northwest Medicine* had become the voice of nearly every medical society in the Pacific Northwest.

Miss Bertha Hallam, Medical School Librarian for 46 years, with friends from class of 1943.

Dr. Esther Pohl Lovejoy, one of 166 women graduates of the University of Oregon Medical School. Through Dr. Lovejoy's financial aid more than 75 students have been able to complete their medical educations.



Miss Elnora Thomson, R.N., pioneer leader in Public Health nursing and first director of the Univeristy of Oregon Department of Nursing Education from 1926 to 1943.

But more than books are required to provide a state with sound medical education, more than buildings, equipment, students, dedicated teachers. The intangible essential is what one philosopher has called "the physicians' divine unrest"—his stubborn quest for more and more knowledge—not for its own sake but to use as a better tool of his trade."

Say a physician is motivated by compassion and he will squirm with embarrassment, ostensibly because he has been schooled to consider such frankness in poor taste. Actually he flinches because the statement is true and therefore threatens his carefully-acquired reserve. Equanimity is a physician's armor—how else could he endure constant exposure to pain and death? But beneath his professional veneer lies the motivation that is part of the history of medicine and medical education. It is the catalyst which has fostered the growth of research as well as the resurgence of postgraduate education for physicians during the past 25 years.

In 1941 Dean Dillehunt established a division of experimental medicine at the School headed by Dr. Edwin Osgood. This first formal step into the medical unknown opened a path which would one day take him to international eminence for his work in leukemia and chromosome research.

But by then the monstrous shadow of World War II had stretched across the civilized world bringing with it cataclysmic changes in the practice and teaching of medicine. Much of the present research had its beginnings in the knowledge gained in World War II field hospitals.

Pearl Harbor shattered many a plan, personal and professional. The faculty was stripped to a skeleton crew as man after man entered military service and those who remained shouldered brutal schedules to support the School's teaching and patient care programs.

Instruction was stepped up to a year-around basis to supply doctors for military service as well as a civilian population depleted of so many doctors by the War. As people by the thousands poured in to work in Oregon war industries, the demands upon physicians were so great that many of them became casualties of war from sheer overwork.

In 1943 a series of heart attacks forced Dean Dillehunt into semi-retirement and he remained dean emeritus until his death in 1953. An editorial in the *Oregon Journal* said of him, "No

The Medical School Library—completed in 1939.

Drs. William Allen, Albert Mackay and John Weeks, 1941.

man can win a greater tribute than to have his name indelibly engraved on the hearts of children who have found a capable and helping hand in their suffering. That Dr. Dillehunt did. It far outshines any words that can be written on paper or chiseled on stone."

The Dillehunt Memorial Lectures, which are held annually at the Shriners Hospital are supported by a bequest in Dr. Dillehunt's will.

The fourth dean of the Medical School was uniquely qualified to fill the post. He knew every step of the way. From the day David W. E. Baird enrolled at Eugene in 1918 through his years as a student, intern, instructor, practicing physician, professor, director, each step was father to the next until all he had learned on the long road up became a Gibraltar of experience and knowledge which supports the Medical School to this day.

Dean Baird has a not-so-secret weapon he uses to measure every proposed reform, innovation, curricular development. The yardstick is "will it benefit the students?" If it will, the Dean is a man singularly hard to dissuade. But he remains unconvinced that change and progress are necessarily synonymous.

The war's end in 1946, brought new dimensions to medical education. So much remained unknown that must somehow be revealed. During the first 75 years, medical education in Oregon had followed an uphill, often meandering path. Now an explosion of knowledge took place and each burst illuminated another dark area to be explored.

The School, the state and county medical societies, various specialty groups—all began offering postgraduate courses, lecture series by visiting scientists. Volunteer faculty members who had long been the backbone of the School's instructional programs returned to teach in record numbers. In 1943 they numbered 102. Today over 600 men and women practitioners donate their time and skill to some phase of the School's instructional programs—quite an increase over the original faculty of seven men. The Sommer Memorial Lectures, now given in conjunction with the annual UOMS alumni meetings, are attended by 500 yearly.

Enthusiasm is as contagious as measles and each new advance, each new technique that

The 14-story Medical School Teaching Hospital, 1956.

The 9-story Research Building, 1962.

pushed back the crippling, the lethal diseases, kindled more understanding and public enthusiasm for medical education and research. The housewife listening to a radio account of an effective new antibiotic, the businessman reading a newspaper report of a surgical "first", the grandmother watching her grandchild run on a once-malformed leg, all of them, by the millions, became a powerful ground swell of support for medical progress. And inevitably, with this support came financial backing at every level of government, as well as from many private sources. State funds built the Crippled Children's Division on the UOMS campus in 1954 and state and federal funds completed the 14-story Medical School Hospital in 1956. It was here that Dr. Albert Starr performed the first successful implantation of an artificial heart valve in 1960. Since that time the prosthesis has been used to save over 30,000 lives throughout the world.

In 1962 the nine-story Research building was completed with $2.5 million from the Oregon State Legislature, the National Institutes of Health and the Medical Research Foundation of Oregon. This organization was formed in 1942 with $5,000 donated by physicians of the Portland Academy of Medicine, an important contributor to medical progress since 1907. The MRF, with current assets of more than $5 million, serves as a fund-raising and disbursing agent for donations to medical education, research and patient care programs.

Now scientists in basic research had a long overdue home of their own, but characteristically, the building was crowded before the move in had been completed. The Portland Hearing and Speech Center, an eight-story Women's Residence completed in 1965, current construction projects such as the expansion of the Medical School Library, a seven-story addition to the venerable Outpatient Clinic, a new parking structure—these too, are symbols in concrete and steel of the growth of medical education in Oregon.

Postgraduate courses launched by the Kellogg Foundation back in the 1940's have continued to expand as practicing physicians from Astoria to Ontario respond to the need to keep abreast with an avalanche of new medical knowledge. Throughout the state the larger hospitals now offer postgraduate courses and lecturers for physicians.

Each year as 340 medical students, 36 interns, 159 residents, and more than 2,000 physicians continue their education, the Medical School campus swarms with young men and women students studying in related fields. The University of Oregon School of Nursing which began in 1910 with three students today has 311 in the baccalaureate and 32 in the masters degree programs. The University of Portland now has a basic degree nursing program and three hospitals, Good Samaritan and Emanuel in Portland, and Sacred Heart in Eugene, grant nursing school diplomas for their three-year programs.

Medical technologists, cytotechnologists, radiologic technologists, dietetic interns, graduate students in audiology and speech pathology, the combined M.S.-M.D. programs, research assistants—all the multiple facets of medical education bring over 1,000 students to the UOMS campus each year.

In 1943 the full-time faculty numbered fourteen. This year it is well over 200. In the 1940's, annual research grants were less than $75,000. Today they exceed $5,500,000. The physical facilities of the Medical School are now valued in excess of $25 million. The atmosphere of academic freedom has attracted many of the nation's top educators and researchers. Teaching programs have been updated, expanded, integrated with laboratory and patient care programs to develop an overall curriculum that is recognized as one of the nation's finest.

Today medicine is a three-pronged weapon against disease and suffering. The research scientist—the teacher—the practicing physician are fused into a force whose impact has wiped out many of man's oldest enemies. And more will be defeated.

For the trailblazers—the men and milestones of a century of medical education in Oregon have opened the way to tomorrow's achievements in the art and science of medicine.

Dr. Laurence Selling, 1882-1964, gifted teacher, physician, medical pioneer.

Dr. Edward S. West, University of Oregon Medical School Admissions Committee chairman from 1930 to 1966.

First Medical School, 1867.

The University of Oregon Medical School today.

Thelma Wilson, author of "Men and Milestones in Medicine," is a member of the Public Affairs staff at the University of Oregon Medical School. A prominent writer, she has directed her talents to writing about medicine and medical education since she joined the medical school staff in 1961. Her articles have appeared in numerous publications, including Medical World News, The New Physician, Resident Physician, McCalls *and* Parents Magazine, *and her work has been quoted in the* Congressional Record. *Mrs. Wilson has written newspaper stories, television and radio shows. She is managing editor of the University of Oregon Medical School publication* Imprint.

The author wishes to acknowledge the valuable resource material in Dr. Olof Larsell's book The Doctor in Oregon, *as well as the dedication, patience and counsel of all those who helped compile the historical information in the story.*

The mural adorning the cover of this summary of medical education in Oregon is the work of John Sherrill Houser, a talented and versatile young Northwest artist. This original 6 by 13 foot painting will be displayed throughout Oregon during 1967.

In the 1961 competion among United States and Canadian painters Mr. Houser was awarded the Elizabeth T. Greenshields Fellowship, enabling him to study in Spain, Italy and Denmark for two years.

A number of his paintings have been reproduced in this country and abroad and his studies of the Lacandon Indians, descendants of the Mayans, have been purchased by the Southwest Museum in Los Angeles.

Mr. Houser is a graduate of Lewis and Clark College and did graduate work at University of California at Los Angeles. After completing his present task, a series of children's portraits, he has been asked to exhibit his works again in San Francisco.

Painting presented by E. R. Squibb and Sons Jan. 11, 1967, as part of the Collegia Medica Series. Artist Stan Galli is well known for his western timber scenes and oils of San Francisco.

IN RECOGNITION

The following firms are to be acknowledged for their generous support and interest in the Centennial Observance of medical education in Oregon. To each we extend our sincere appreciation:

Oregon Medical Association
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Oregon Medical Research Foundation
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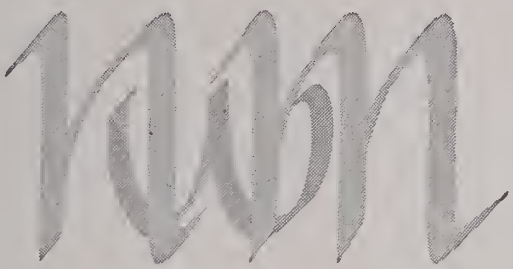

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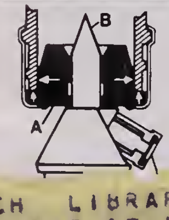

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